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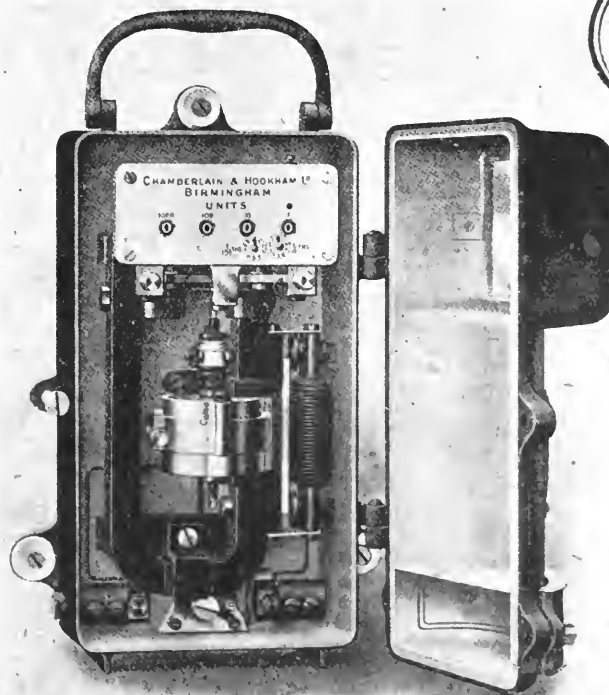
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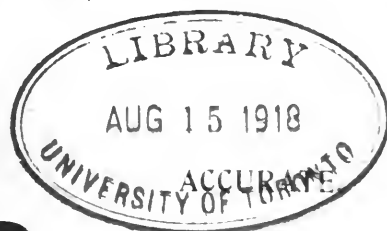
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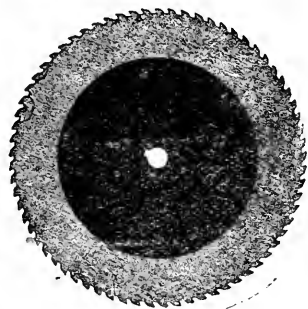
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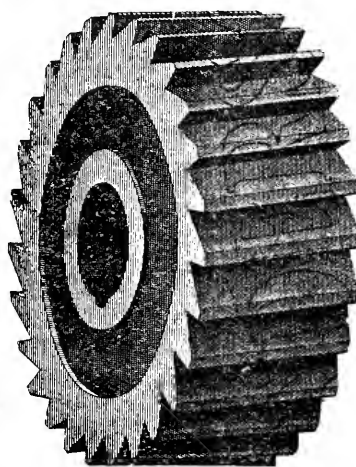
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# Mining Journal,

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South African Mines, Commerce and Industries.

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## Notes and News.

Elsewhere in this issue we print the more important clauses of the new Mining Leases Bill which is being introduced in the next session of Parliament by the Minister of Mines. The Bill, it will be seen, is somewhat far as it goes, and makes provision for a Mining Leases Board and for larger municipalities. It will therefore be welcomed by those interested in the development of the Far East Rand. In these two respects the present Bill follows closely the provisions of the Bill introduced last year by the Minister of Mines, and withdrawn by him at the last moment. That Bill, it may be remembered, was based on the recommendations of a Select Committee, and was designed to facilitate the development of the Far East Rand. At first glance it would seem, however, that the value of the Bill may be seriously impaired by the somewhat obscure Clause 2, Sub-section 4.

\* \* \* \*

In a speech made at a luncheon in his honour at Springs on Tuesday, the Administrator made a notable reference to the great future of that Far East Rand centre. *Inter alia*, he said that his purpose was to visit as

many places as possible in the Transvaal so as to come into personal contact with the requirements of each community. He had been much impressed with the district, and as he stood in the centre of it and looked round at the gold mines in every direction, he asked: "Can you show me anything in South Africa, or indeed in the world, to equal the wealth, the possibilities, and the opportunities of the unique area which you control as a municipality." He could not, of course, definitely promise anything but he could assure them that the question of roads, hospitals, town lands, boundaries and other things would receive sympathetic and favourable considerations and the best would be done in every way to help the development of this wonderful area. Mr. George Hills, M.P.C. proposed the toast "Town and District," and the Rev. Wm. McCulloch, in a humorous and rousing speech, responded. He said that Springs was the port of entry for the whole of the Eastern Transvaal and when they got their railway linked up between Heidelberg, and Geduld on the Witbank line, and the long-promised direct line through Breyten and Swaziland to Delagoa Bay, they would come into their own, and become strong through their commercial possibilities. Mr. Stark proposed the toast of the mines, and referred to difficulties which had been successfully overcome both by Geduld and Springs Mines. Mr. Newhouse, chairman of the Geduld Company, replied, showing how in many ways the mines and the municipality could work in harmony.

\* \* \* \*

The Board of Reference for the settlement of industrial disputes, which promises to prove so valuable on the Rand, seems very similar to the "Industrial Council" now favoured in Great Britain. In the course of the debate in the House of Lords recently on the Marquess of Salisbury's motion respecting "Industrial Unrest," Viscount Milner, in replying, referred to the Whitley Report. He said that the establishment of Industrial Councils was by universal consent the most important point in the debate. The Whitley Report reached the Government as a confidential document in March. It met with universal approval, and very high hopes were raised as to the beneficial effects that might result from the adoption of the system recommended. Its reception was encouraging beyond the highest hopes of those warmly in favour of it. Seven of the Industrial Unrest Sub-Commissions emphatically favoured it. The Trade Unions by a great majority favoured its principles; several made criticisms and reservations; hardly any were absolutely adverse. Taken as a whole, the views of the Trade Unions and of the Employers' Associations were overwhelmingly in favour of the recommendations. The Government had

no longer any doubt as to what was the proper course to pursue, and they had given instructions to the Ministry of Labour to take immediate action to carry out the scheme. A new department of the Ministry of Labour was now at work trying to get Industrial Councils established as quickly as possible in the various leading industries. Certain trades were to be started with, as these, before the report was published, were making preparations for the constitution of such Councils. From these the Ministry would proceed to more difficult spheres of action, and so cover as large a portion of the field as could be covered at once, as quickly as possible. Viscount Milner said that although he was not absolutely optimistic, he thought that he could say that the new departure was the most hopeful that he could remember in the great field of social reform. The situation was full of anxiety, and the work which had been done was as nothing compared with the mountains that had to be climbed, both in the war and in peace.

\* \* \* \*

According to a report to his Government by the United States Consul-General at Capetown, Angola coal deposits offer excellent possibilities for the production of oil and oil products, although the coal itself is of no great utility as fuel. The coal is said to be found in large quantities at Quilungo, which is only ninety miles from the port of Loanda and about seven miles from Zenze railway station, to which it is to be connected by rail in the near future. The coal is very easy to mine, being accessible by means of adits to the mountains, and it is now being worked to supply a Government contract. The contract coal is used for fuel, but the product in its raw state is said to be too bituminous for this purpose. It has much more valuable products, which a chemist has been extracting from it by means of a small still. It has been found that the coal, after having been in the still, resolves itself into 31 per cent. of crude oil and 56 per cent. of coke, which is a satisfactory fuel for engine boilers. The oil has been submitted to various refining processes, and samples have been obtained in the form of good benzine suitable for cleaning delicate materials, petrol for fuel for motor engines, paraffin suitable for illumination or for fuel, lubricating oil suitable for delicate machinery, a thicker lubricating oil for use on engines worked by steam, and vaseline. A company for the exploitation of the mines, it is stated, has already been formed, and the capital fully subscribed.

\* \* \* \*

The Ermelo district, where coal, oil shale and iron ore have combined to attract considerable attention, bids fair to become at no distant date one of the most important industrial centres in the Union. The iron ore, which is of remarkable purity, has only recently been added to the list of commercial products, so that quite apart from the possibilities of the shale, which is as yet a factor of somewhat indefinite value, the district appears to be possessed of those materials which have been the foundation of busy manufacturing areas in other parts of the world. As far as coal is concerned, the Breyten Collieries have given a lead to production in the Ermelo district which has been quickly followed up by other concerns that are either making an output at the moment or are preparing to do so as soon as opportunity offers. The most recent sign of activity is the boring which is being carried out about a hundred yards from the railway at Voorschlag Siding, some six miles south of Breyten. The supply of heavy rails for the purpose of connecting the mines with the main line of railway appears to be a difficulty that will take a little time to be overcome. Later on the question of transport facilities to Delagoa Bay, the natural outlet for the coal of the Ermelo district, will undoubtedly give rise to considerable agitation on the part of coal owners in that neighbourhood. For some time past, indeed, great anxiety has been felt with regard to the date when the building of this much-discussed route will be undertaken. It seems to be taken for granted that the extension will be made from Breyten, which is already a junction of some importance, for here the main line through Springs and Bethal joins up with the through route between Machadodorp, Ermelo, Pieter Retief and Glen-

coe to the Natal port. It is not unlikely, however, that a good deal more discussion will take place before a decision is finally arrived at, not only with regard to the date of the extension, but also with respect to the point whence the extension will be made. In other words, it does not seem at all certain that Breyten will finally be the point of departure, if, as has been said, more than one alternative route has been surveyed and worked out. The iron ore which is found a little to the south of Ermelo is, as has already been remarked, of great purity, assays going very close to 70 per cent. having been obtained, without traces of deleterious components. A large tonnage is in process of transport to Vereeniging, and the best results are anticipated from the trials which are to be made there. Since the shipment of iron ore from one coal district to another at some distance from it will not be an economic advantage from any point of view when conditions allow local smelting and manufacturing to be carried on, it is reasonable to assume that an industry will be established at or near the source of production if the supply of ore proves to be as large as is estimated. Apart from the investigation which was made some years ago, at a large expense, of the oil shales in the Mooifontein area, a few miles south-east of Breyten, nothing more seems to have been done in this direction. The Mooifontein shales, although of excellent quality in places, were distinctly patchy. It is evident that the shales which attain such satisfactory dimensions towards the south-west, as Wakkerstroom is approached, thin out somewhat in the neighbourhood of Breyten, although from what is known of the characteristics of the shale beds in the Wakkerstroom area it cannot be definitely stated that even in the Ermelo district these beds are unlikely to prove of any industrial value. It may be added that a cannel seam of good thickness is said to have been located in the vicinity of the iron ore deposits, south-east of Ermelo.

\* \* \* \*

At the November meeting of the Chemical, Metallurgical and Mining Society, Mr. Morrisby sent a letter, in answer to a letter he wrote to the Deputy Commissioner of Kolar, on the question of covering cyanide dumps. The latter referred the letter to Mr. Gifford, Superintendent of the Champion Reef Gold Mining Company. This is Mr. Gifford's comment: "I regret I can give no information regarding any vegetation which will grow on these sand dumps, as, though we have experimented with several hardy creepers, we found none which served the purpose. We have, however, been very successful in entirely preventing any blowing sand, even during the heaviest monsoon, by spraying the sand immediately after it is discharged, with diluted slime from our Butters' filter plant. This serves very well if the spraying is done daily, as in the case of discharge of current sand, but where a portion of a dump is finished with, and it is not convenient to spray it daily, we form shallow slime dams at convenient points at the foot and on top of the dump, and from these plaster the sides of the dump by hand for a thickness of 4 in. or 5 in. With our particular slime, carrying a little lime and magnesia, such a covering gets quite hard and stands the heaviest winds. The top of the dump is similarly covered by allowing slime to run over it until it is coated for several inches in depth. Our only trouble with an impermeable dump of this sort has been in getting rid of the amount of rainwater which collects on such a large surface on the top of the dump, and to do this and avoid causing big wash outs in the side of the dump, we have had to build rough timber and stone drains of large section from top to bottom, and to so arrange the slime covering on top with slight inclinations to direct the water towards the drains. I do not know if the slime from the banket is as viscous as ours, but we have found the addition of a little lime very useful for hardening or setting the slime, and with the covering above described we have on this mine quite abolished the sand nuisance." The President of the Chemical, Metallurgical and Mining Society added: "Mr. Gifford's remarks are very interesting and opportune, as the local Inspectors of Mines have instructions to strictly enforce Regulation No. 158 (27), which refers to the spraying of tailing dumps to prevent the dissemination of dust."



In the course of a report on the tenders received by the City Council for annual supplies for 1918, the Capetown City Engineer states: "I have made a comparison between the prices quoted for the 354 items which have been tendered for in the 'general' schedule as against the prices paid for these goods immediately before the war. A sovereign expended on each of these lines in 1914 would have purchased for £354 material which to-day would cost £771. In other words, the present value of a sovereign as compared with 1914 is 9s. 2½d." This, of course, puts the actual position in a much too favourable light, because it bases the comparison upon the 354 lines which are least affected by the war. The other 1,150 lines, for which no one will tender, will probably show a much higher rate of increase. By reference to last year's report, I find the number then tendering was 50, against 35 this year. In the contract form special clauses have been inserted protecting firms against penalties in the event of their being unable to supply the goods, in consequence of the abnormal conditions or in the event of a considerable advance in prices resulting from the war. These clauses have operated smoothly and successfully during the last two years to the mutual advantage of the Council and the firms who have catered for the Council's requirements. Under these circumstances, it is rather disappointing to notice that so many of the leading firms in the city have been unable to price schedules as in former years. In the absence of such tenders, competition has been reduced to a minimum, and it has been necessary to examine each offer in a very critical spirit. In consequence of the greatly increased prices or the absence of a tender, no contracts are recommended for such important items as asphalt (compressed and mastic), most lines in bolts and nuts, also washers, buckles for harness-making, cocks, copper (sheet and bar), glass (also gauge and lamp glasses), grease of all kinds, hinges, all but two lines of bar or sheet iron, hurricane lamps, and all other lamps, lead pipe, and also sheet lead and virgin pig, all nails but American cut, wire netting and wire, lubricating oil, paper, petrol, rivets, screws, screens, and sieves, steel of all kinds, waste, etc. In the "general" schedule, tenders were invited for about 1,500 items. The 48 firms who submitted priced schedules furnished 600 tenders, and of these nearly 400 have been recommended for acceptance. Allowing for the cases in which two tenders are recommended for different qualities of the same article, contracts are recommended for about 350 out of 1,500 items. The foregoing figures will show that contracts are recommended for very many lines in respect of which only one tender has been received. In all such cases this has been done after comparison, not only with last year's contract price, but also with the current local price for the same commodity. In each instance the lowest price offered has been underlined in the schedule, and these are recommended for acceptance in the full belief that conditions cannot return to the normal during 1918.

\* \* \* \*

The latest Rezende cable reports that driving at the 350 ft. level, which was stopped earlier in the year through fears of water, has been recommenced, the average value for 10 ft. driven being 21 dwts. over 50 inches. In July it was already known that 676 feet at this level had been in reef averaging 26 dwts. over 61 inches. At the 4th level, 140 feet driven east has exposed reef averaging 4½ dwts. over 45 inches, while the east drive for an extension of 190 ft. averages 7½ dwts. over 55 inches. The faces of both drives are said to show considerable improvement, and winzes from the 350 ft. level appear to indicate that the rich section has not yet been reached by the east drive of the 4th level. Thus winze No. 3, 75 feet east of the furthest point reached in the No. 4 level, has been for 70 ft. in ore averaging 4½ ozs., unreduced assay value, over 44 inches, and winze No. 4, 100 ft. east of No. 3 winze, has been sunk 23 ft., 15 ft. being in reef averaging 48 dwts. (unreduced) over 72 inches. The outcome of further work will be watched with interest.

## TOPICS OF THE WEEK.

### THE CONSOLIDATED GOLD FIELDS' REPORT.

Owing to the delay in the mails the annual report of the directors of the Consolidated Gold Fields reached us only this week. In our last issue, however, we were enabled to give some extracts from the annual reports of Mr. Christopherson, the Transvaal manager of the company, and of Mr. C. D. Leslie, the consulting engineer. A full report of the speech of the chairman, Lord Harris, made at the annual general meeting in London, was also printed last week. The information thus given may be supplemented by some further extracts from the directors' report, which is now available. In the course of that report, the directors point out—following the lead given by Mr. Christopherson—that "the company's normal revenue in dividends from the mines under its control has been adversely affected by conditions arising from the war, and by the incidence of taxation which bears most heavily on the lower grade mines. Every effort is, however, being made to maintain profitable working on these mines pending a return to normal conditions." Dealing with the prospects of the subsidiary companies, the directors state:—

"The continued favourable results and prospects disclosed on the Far Eastern Rand have, apart from the consequent appreciation in value of the company's shareholdings in this district, a direct bearing on the value of the farm Grootfontein (owned as to 86 per cent. by the company), a portion of which, equal in extent to 500 claims, it is proposed to sell to the Sub-Nigel, Ltd., for shares in that company. The sinking of a vertical shaft, in order that there may be no break in the continuity of gold production, has necessitated the provision of fresh working capital, and proposals in this connection (sanctioned by His Majesty's Treasury), as well as for the acquisition of the area referred to in the preceding paragraph, will shortly be laid before the shareholders of the Sub-Nigel, Ltd. The present ore reserves have since last year increased both in tonnage and in value. The difficulties of working, referred to in last year's report, on the Robinson Deep, Ltd., have since then been accentuated, owing to the scarcity of native labour, and no substantial relief can be expected until the new vertical shaft ("Chris" shaft) is available. At the end of July last the shaft had reached a total vertical depth of 2,686 feet, of which 2,157 feet represents twelve months sinking, and it is expected that it will be connected with the mine workings early in 1918. Although it was possible to increase somewhat the gross profits earned by the Simmer and Jack Proprietary Mines, Ltd., Simmer Deep, Ltd., and Jupiter Gold Mining Co., Ltd., during the past financial year, greater difficulty has since been experienced in obtaining a sufficiency of native labour, and the cost of mining material has been rising. In addition, the burden of direct and indirect taxation falls heavily on these low-grade mines. In the case of the Knights Deep, Ltd., the normal lowness of grade does not allow a sufficient margin for unforeseen contingencies, such as the unfavourable conditions created by the war, in addition to the taxation referred to, with the result that a marked falling off in the profits is shown for the period."

Mr. C. D. Leslie in his report enlarges on the working cost question and points out that working costs continue to increase, and to obscure the high efficiency being obtained, for which the mine managements and their employees deserve great credit. In another noteworthy passage Mr. Leslie observes that persons who have been disappointed with the Rand in the past "may find it difficult to appreciate its soundness to-day or to realise that good security for investment is afforded in high-grade mines such as those of the Far East Rand, which have high margins for profits, long lives, shaft capacity, and ore reserves far in advance of present requirements and the prospects of future working on an extended scale." As might have been expected from recent developments, he entertains a high opinion of the prospects of Grootfontein and Sub Nigel. He writes: "Development in Springs Mines, Ltd., as well as the western development in the Daggafontein Mines, Ltd., to the north, together with the Sub Nigel development to the south of Grootfontein, indicate strongly that this farm (Grootfontein) is traversed from end to end by the richest course of the gold-bearing reef of the Far East Rand." The Goldfields, through its substantial interests in the State Mines, in the Sub Nigel, and in Springs Mines, is now well represented on the Far East Rand, and should share materially in the growing prosperity of that district.

## THE NEW MINING LEASES BILL.

### Mining Leases Board to be Formed—Larger Mynpachts for Far Eastern Farm Owners—Important Amendments to the Gold Law.

As we go to press, a copy of the new Mining Leases Bill, which is to be introduced during the forthcoming Session of Parliament, has reached us. The principal features of the Bill are the provision for a Mining Leases Board and for the granting of additional ground to the owners of mynpachts, under certain conditions. In those two respects the Bill follows the Mining Leases Bill, which was brought before the House of Assembly last year. Some of the more notable clauses of the present Bill are as follows:—

#### MINING LEASES BOARD.

1. (1) There shall be a Board (to be styled the Mining Leases Board and hereinafter called the Board) which shall consist of the Government Mining Engineer, the Secretary for Finance or the persons acting as such, and two other persons holding or acting in offices in the public service and designated by the Governor-General for a period not exceeding three years. (2) At every meeting of the board at which a recommendation is made, three members shall be a quorum. At every other meeting two members shall be a quorum. The minutes of every meeting shall be kept by a secretary, who shall be an officer in the public service designated by the Minister. (3) The Board shall inquire into any application for a lease or, subject to the provisions of section *fourteen*, for an amendment of a lease, whether granted under this Act or under Act No. 35 of 1908 of the Transvaal (hereinafter referred to as the principal Act), and shall recommend whether and to what extent any such application shall be granted or refused. (4) Every recommendation of the Board on any application for a lease shall, after action has been taken by the Governor-General, be laid within fourteen days thereafter upon the tables of both Houses of Parliament, if Parliament is then in session, and, if it is not in session, within fourteen days of the commencement of its next ensuing session.

#### LARGER MYNPACHTS.

2. (1) Notwithstanding anything to the contrary contained in paragraph (b) of section *thirty* of the principal Act, the holder of the mineral rights may, when selecting his mynpacht under section *twenty* of the principal Act, apply for a grant of a lease of the undermining rights of an additional area of the ground which is to be proclaimed and which is contiguous to the mynpacht. (2) the provisions of this Act relating to applications for leases under section *three* (except as to the opening of applications) shall apply in respect of applications under this section. (3) If, on the advice of the Board, the Governor-General is of opinion that, owing to the natural features of the reef, the grant of such a lease is necessary for the purpose of constituting the mynpacht, together with the area leased, a workable mining proposition, and that such grant is advisable in the public interest, he may, before exercising his powers under section *thirty* of the principal Act, grant such a lease to the applicant. (4) The grant of such lease shall be subject to the condition that the lessee shall, in addition to taxation, pay to the Government a royalty in the form of a share of the profits, derived from the working of the joint area. Such share of the profits shall be in accordance with terms to be specified in the lease, so that the amount payable shall be not less than the amount estimated as payable if the profits from the leased area alone had been subject to royalty and if such royalty had been calculated by deducting 6 per cent. of the revenue from 60 per cent. of the profits of the leased area: Provided that the lease may prescribe a lower scale of royalty on condition that such lower scale is made subject to the approval of both Houses of Parliament. (5) The area for which the lease is granted shall become proclaimed land as soon as possible thereafter and the necessary proclamation shall be issued by the Governor-General. The lease

when granted shall be deemed to be a lease under section *three* and the provisions of this Act shall apply accordingly.

#### PROVISIONS REGARDING LEASES.

3. Section *forty-six* of the principal Act is hereby repealed and the following provisions are substituted therefor: "46. (1) Whenever the Governor-General has, in respect of any land, determined to exercise the powers mentioned in paragraph (b) of section *thirty* of the principal Act, he shall by notice in the *Gazette*, declare such land open for leasing under this section. Before so declaring it open for leasing the Governor-General shall direct such land and or any portion thereof to be surveyed into claim areas and demarcated, and shall, when any such land has been so surveyed and demarcated, by notice in the *Gazette* call for tenders for a lease under this section: Provided that if the area is, in the opinion of the Government Mining Engineer, insufficient in extent to constitute a separate mining proposition, the Government may dispose of it in the manner prescribed in section *fifty-two* of the principal Act for the disposal of bewaarplaatsen. (2) Any person desirous of acquiring a lease under this section shall transmit his application marked on the outer cover as such, to the Chairman of the Board. The application shall contain full particulars of the applicant's financial proposals, of his general scheme of working the area, and of the share of the profits arising from such working or other consideration which he is prepared to pay to the Government in respect of the lease, in accordance with the provisions of section *five*. (3) The notice in the *Gazette* shall specify the closing date of tenders, and as soon thereafter as possible the Board shall open every application received before the specified time and shall, by notice in the *Gazette*, publish the name of every applicant and the area which is the subject of application. As soon as possible thereafter the Board shall submit its reports and recommendations to the Minister. (4) Upon consideration of the recommendations of the Board the Governor-General may refuse an application or he may, subject to the provisions of this Act, grant it on the terms indicated in the notice calling for tenders and in the applicant's tender, with such modifications as he may deem advisable and as the applicant may accept: Provided that no departure shall be made from the Board's recommendations as to the acceptance or refusal of an application or as to the terms to be embodied in a lease, without further reference to the Board: Provided further that if, on such reference to the Board of any proposal to reject or amend any recommendation in regard to the leasing of an area, the Board reports against the proposal, no lease of that area on terms not recommended by the Board shall be entered into, or if entered into shall be valid or binding, unless it has been approved by resolutions of both Houses of Parliament. (5) As soon as possible after the acceptance of the application, a lease shall be entered into between the applicant and the Governor-General and such lease shall contain the terms and conditions agreed between the Governor-General and the applicant, subject always to the provisions of this Act."

The Bill includes several other clauses amending the Gold Law in regard to prospecting.

#### MINING EXAMINATIONS.

Study for Certificates as Mine Captains, Mine Managers, Surveyors, Mechanical and Electrical Engineers, and Engine Drivers. Private Tuition and Correspondence Lessons, where personal tuition is impracticable. Practical Mathematics and Electrotechnics. E. J. MOYNIHAN, Consulting Engineer, Cuthbert's Buildings, corner of Eloff and Pritchard Streets, Johannesburg, P.O. Box 2061.

## THE GOVERNMENT MINERS' TRAINING SCHOOLS.—VI.

[By a SPECIAL REPRESENTATIVE OF "ONS LAND."]\*

In the previous article particulars were supplied regarding the writer's visit to the Wolluter Mine Workers' School, and conversations with the scholars, after having finished their work at the mine, were given. Now some particulars will be supplied regarding a visit to the Bantjes Mine Workers' School and conversations with scholars during working hours in the mine. The writer for that purpose had to descend the mine, a journey which was most instructive, but in a great measure very fatiguing. Great was his surprise when he was told that the Minister of Mines had several times undertaken the same journey. Only then the writer began to realize that the Minister of Mines in our country did not occupy a very enviable position. It is not here intended to write about the journey through the mine. Only does the writer wish, in passing, to draw attention to the elaborate, and almost wasteful, way in which use is made of water, as a preventative for phthisis. What he saw in connection therewith confirmed in every instance what he was told previously by Mr. Kotzé, the Government Mining Engineer. In reply to a question asked of him, what the principal causes were of the decrease in phthisis, Mr. Kotzé replied as follows:—The whole matter depends largely on the use of water. Formerly no water was taken into the mine. At present, however, there are sprays in all mines. In every mine drive there is a water pipe, supplied for the purpose, and this water pipe extends to every point where work is in progress. All drilling, all blasting, all the lashing and removal of rock is done with the use of water. The mine owner supplies the water, and supervision is exercised on behalf of the Government and on behalf of the mine owners, that the water is used in a proper manner underground. The blasting at present takes place only at the end of the working time. In so far as it is possible all whites and natives must have left the mine before the blasting commences, and everything is so arranged that even the whites, who have to carry out the blasting, are not obliged to inhale dust.

### THE INVENTION OF MR. KOTZÉ.

Mr. Kotzé has invented a machine by means of which the amount of dust in the mine atmosphere can be accurately and quickly determined. The determining of this dust standard is nothing new. For some year past at fixed periods the dust in the mines has been investigated by the so-called "dust samples." Up to the present, however, the amount of dust has been fixed per milligram of each cubic meter. Now with the assistance of the apparatus invented by Mr. Kotzé the dust standard can be recorded in milligrams per cubic centimeter, besides also the total dust particles per cubic centimeter are recorded. This last is of great importance, as the danger of the dust in the first instance is not reflected in the quantity, but rather in the total number of particles in certain volume. If, for instance, in a certain space a quantity of dust is determined to weigh say two ounces, and in the same space in another portion of the mine a quantity of dust is determined weighing three ounces, it cannot be considered as an absolutely decided case that the place last referred to is more dangerous than the first regarding phthisis. The condition depends entirely on the nature of the dust, namely, if this consists of coarse particles, or small, fine particles, which easily penetrate the lungs. Mr. Kotzé gave it as his opinion that we had mastered the phthisis evil, and that there should be absolutely no reason for further fear thereof. Again the writer wishes to repeat that the truth of what Mr. Kotzé had previously told him regarding this matter was plainly noticeable during the visit to the Bantjes Mine.

### TALKS WITH SCHOLARS AT THE BANTJES MINE SCHOOL.

In company with Mr. Fergusson and escorted by Mr. Wonnocott, the Superintendent of the Schools for Mine

Workers, and Mr. Beaumont the Manager of the Bantjes Mine, the journey through the mine was accomplished and the work of the scholars deep under the ground was inspected, also short chats were held with some of them. The chats were exchanged under the same conditions as were those at the Wolluter Mine Workers' School, in the absence of the above-mentioned gentlemen, in order that the scholars could freely express their views. The communications were practically of the same nature and tendency, so that it would be superfluous to repeat here again more than two. In order to be better understood, these will be given in the form of questions and answers in the same rotation as they were put and answered. The following conversation took place with Jan Albertyn, of Colesberg, aged 23 years, who had then been 16 months at the Mine Workers' School:—

Question: "How did you become acquainted with the Mine Workers' School?"

Reply: "Through the medium of a certain Mr. J. Pienaar, of the Colesberg district, I became acquainted with the conditions governing entrance to this school. I then sent an application for admission to the Superintendent of the Government Training School for Mine Workers, Box 809, Johannesburg, and about a week later I received a reply. Ten days after I had sent in my application, I was here a scholar at the school."

Q.: "What was your first impression when you went to work underground?"

A.: "I did not find the work difficult and in no way disagreeable."

Q.: "Up to which standard were you educated?"

A.: "I attended school at Colesberg and passed Standard V."

Q.: "Are you able to follow the lectures which are given here?"

A.: "Yes, I can follow the lectures quite well. There are scholars here who say they are unable to follow the lectures satisfactorily; they have, however, had less lower education."

Q.: "Do you consider the term of two years too long?"

A.: "I do not find the term of two years too long. I have now been here 16 months, and still there appears a lot more for me to learn."

Q.: "What wages are you in receipt of at present?"

A.: "I earn now, together with my bonus, 6s. 9d. per day. In September, after paying my board and other private expenses, I had a balance of £2 16s. What I have over I hand to the Superintendent each month to save for me, until I ask for it to send to my father."

Q.: "How many students are there at this school?"

A.: "There are at present 32 students, who have come from all the provinces of the Union. Among them are three English-speaking; the remainder are Dutch-speaking Afrianders."

Q.: "Do you agree with one another?"

A.: "Oh, yes, we work splendidly together."

Q.: "Would you advise other boys to come to these schools?"

A.: "I would advise every youth who is desirous of earning his bread by honest work to go to one of these mine schools."

Q.: "What do you do in your spare time?"

A.: "Reading and sports."

Q.: "Have you got Dutch books in your library?"

A.: "They have good Dutch and English works." (The writer found a great many South African as well as good works of Flemish and Dutch writers.)

Q.: "Do you feel well here?"

A.: "I feel at present just as well as when I first came to work here."

The following conversation took place with G. J. Fourie, age 24 years, who had for 13 months followed the lessons at

\*Translated from a series of articles in *Ons Land*.



the school. He stated that he was born in the district of Reitz (O.F.S.) and had attended school up to Standard II. in the Frankfort district:—

Q.: "Are you able to follow the lectures which are given?"

A.: "Yes, I can follow the lectures, but I find that it would have been better for me if I had had more education."

Q.: "Would you advise your friends to come to these schools?"

A.: "I would give such advice to every healthy boy, who intended to earn his bread in an honest way by work. It would, however, be advisable to be educated up to Standard V."

Q.: "What are your wages at present?"

A.: "I receive, including my bonus, 6s. 9d. per day. The previous month (September), after paying all my expenses, I had a balance of £4 11s. I sometimes send money to my father, who resides in the Bloemhof district."

So much for these interviews. We wish only to add thereto the following:—At present every healthy boy who

has attained the age of 16 to 25 years, provided he is declared physically fit by the Medical Bureau, is allowed to enter these schools, no matter what standard in the lower school he had attained. Rightly, the Government is of opinion that even the boy who had had a very little lower education can become a good mine worker, and it would thus be wrong, because he has only had a little education, to keep him away from these schools. The time may, however, come, if once the fullest use is made of the opportunities offered, when the conditions of admission in so far as they refer to intellectual development will be made more severe. Especially must sight not be lost of the opportunity, which an intellectually developed boy has after he has passed one of these schools, to work himself up to be a mine captain and even to a higher position. In a subsequent article we hope to draw attention to a few other points in connection with this school and the work done by the scholars, to conclude afterwards by giving some particulars regarding the work and aims of the Phthisis Board.

*To be continued.)*

## THE RECORD OF THE NEW RIETFontein ESTATE.

An extraordinary meeting of shareholders of the New Rietfontein Company has been called for 12 o'clock noon on the 27th February, 1918, for the purpose of passing resolutions to wind up the company and appoint liquidators. If these resolutions are passed, shareholders will be asked to confirm them at a further meeting to be held at 12 o'clock noon on the 22nd March, 1918. In the course of a circular issued this week to shareholders it is stated that the company was first formed in June, 1892, to take over the property of the Rietfontein Estate and G.M. Company, Ltd. In 1895 further property was acquired from the Rietfontein Deep Level G.M. Company, Ltd., and the South Rietfontein G.M. Company, Ltd. In 1896 the Rietfontein A., Ltd., was floated on a portion of this company's mining area, and in 1902 further mining ground was disposed of to the Rietfontein B., Ltd. In 1905 these two companies were absorbed by the company, and the areas previously sold to them once more became portion of the property of the company, which at that time, exclusive of the freehold titles (still possessed to-day), equalled an area of about 745 claims. The area still retained is equivalent to about 288 claims—only 3, however, are actually held under claim licence, the remaining area consisting of the company's three mynpachts. The directors have retained this ground as mining ground in order to protect the title to the machinery and buildings which are erected thereon. All the rest of the mining property has been abandoned. Upon the absorption of the Rietfontein A. and B. companies in 1905, considerable development work was taken in hand with the view to starting work with the enlarged plant, the erection of which was also begun about the same time, the number of stamps being increased from 60 to 120 and the various other units of the reduction works being likewise enlarged to deal with the greater tonnage. In September, 1906, the full mill of 120 stamps was at work and the working profits earned approximated £16,000 per month for about two years, when they gradually fell until, a year later, in 1909, they reached the low figure of about £4,000 monthly. This as was explained to shareholders at the time, was due to a considerable drop in the grade of the ore. The reef was also cut off by a big dyke in the eastern part of the mine, and boring operations on the other side of the dyke failed to intersect the reef series, although the hole was carried down to a depth of 3,553 feet. In 1910 the working profits averaged £1,300 a month, but in 1911, owing to a reduction of the average working costs as compared with the previous year from 27s. 4d. per ton to 21s. 6d., these profits rose to an average of £3,280 a month. In 1912 the average monthly working profit was £3,280, but in 1913 it dropped to under £1,200 a month, due to a fall in the value of the recovery of over-48s. per ton. In fact, the last month of the year showed a loss. The directors then, upon the advice of the

consulting engineer, decided to reduce the scale of operations, and the average number of stamps at work was decreased from 120 in 1913 to 70 in 1914, for which year the working profits averaged under £200 monthly. In 1915 the payable ore reserves were exhausted, and the directors were reluctantly compelled to stop all work in August, except the treatment of a small quantity of slime. At the end of the year operations ceased entirely. The position, therefore, is that the mine is worked out, there being no payable ore left. During its existence the company has paid dividends amounting to 147½ per cent., and in this manner has distributed to its shareholders a total of £787,352 18s. A further distribution by the liquidators will be possible, as the amount of cash in hand to-day, realised principally by the sale of machinery and buildings, is about £72,000, in addition to which there are a few of the buildings, of brick construction, left, as well as the freehold area, amounting altogether to about 4,300 English acres. The situation of this ground, about eleven miles from Johannesburg, should ensure a fair price being obtained for it, and the buildings thereon, as much of it is favourable for farming operations.

## ANSWERS TO CORRESPONDENTS.

*All enquiries addressed to the Editor must bear the writer's name and full address. We cannot reply to enquiries by letter, but telegrams with replies prepaid will be answered. Correspondents are requested to write their names and pseudonyms distinctly.*

"C. P." (Durban).—Purely a speculation. We cannot explain the market movements.

"Inquirer."—The shares are purely a speculation, and we cannot advise you in regard to them. On the general question, it is impossible to forecast how the ground will develop.

"Interested."—It is understood that the Bill will be introduced early in the forthcoming Session.

"E. E."—The company has no office in Johannesburg. Write to the secretary at Bulawayo.



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## THE WEEK IN THE SHAREMARKET.

Generally Dull and Uninteresting—Limited Business.

SATURDAY'S call showed prices steady with an improvement in Geduld Props. S.A. Lands, which reached 6s. 4d. overnight, came back to 6s. sales and sellers. The rise of stocks in this area is, of course, a question of future possibilities. On Monday morning prices were firm with improvements in Springs, Modder Easts and the Options. After the call Modder East advanced to 22s. 6d., the three-year Options to 7s. 9d., and the four-year to 8s. 9d. They all, however, closed below best. On Tuesday the market was easier, with the exception of Rand Selection and Geduld Proprietary. There was a bit of a run on S.A. Lands. A good many Modder East Options changed hands at lower rates. The recent advance in Knight Centrals fizzled out. Wednesday brought no improvement. Nourse Mines have come down considerably as a sale at 16s. 6d. obviously proves. Modder Easts and their Options were lower, and generally there was no life in the market. Sakalavas ran up to 14s. 6d. overnight and made a further advance to 17s. at the opening this morning. So far as can be ascertained, there was no justification for this rise beyond mere rumours. The market soon came to the same conclusion, for the stock promptly dropped back to 10s. On Thursday the call was dull, the only feature of interest being an advance of 9d. in Springs. Modder Easts and the Options were also a trifle harder. Sakalavas had a further set-back to 8s. The fluctuations in this stock during the week have been somewhat unusual. Starting at 7s. 3d. they rose to 17s., and are now down to 8s. Query: Who are the unfortunates that always get landed with these sort of things at top prices? The market has not been satisfactory on the whole, though prices were maintained. Business is very much restricted, and the large operators and controlling houses are holding their hands, leaving the field to the professional element. The following dealings have taken place in outside stocks:—Sales: Sakalavas, 7s. 3d. to 17s., closing 8s.; Monteleos, 35s. and 32s. 6d.; Phoenix, 1s.; Alkalis, 80s. and 70s. All these transactions, except Phoenix, have been in odd lots. Buyers and sellers: Rietspruits, 12s.; Union Tins, 3s. 7d.; South Van Ryns, 10s. 9d.—11s.; Verdites, 11d. sellers; Henderson's Estates, 5s. 3d.; Options, 1s.

The market was dull on Friday morning, with slight improvements in Nourse Mines, Modder Bs., Modder Easts and Main Reefs. The following alterations in prices took place:—Buyers and Sellers: Main Reefs, 14s.; Modder Bs., £7 1s.—£7 3s.; Nourse Mines, 16s. 9d.—18s.; Springs, 66s. 3d.—63s. 9d.; Wolluter, 5s. 9d.—6s. Sales: City and Suburbans, 15s. 6d.; City Deeps, 57s.; Jupiters, 3s. 9d.; Knight Centrals, 4s. 2d.; Leeuwpoots, 16s.; Lydenburg Farms, 8s. 9d.; Modder Easts, 22s. 3d.; Durban Deeps, 10s.; S.A. Lands, 6s. 5d.; Zaaiplaats, 8s. 6d.

	Fri. 4th.	Sat. 5th.	Mon. 7th.	Tues. 8th.	Wed. 9th.	Thurs. 10th.
African Farms . . .	8 5	8 5*	8 0*	8 5	8 5	8 3*
Apex Mines . . . .	6 6*	6 6*	6 6*	6 9*	6 9*	7 0*
Bantjes Con. . . .	2 11	3 1	—	3 3†	2 9	2 11
Brakpan Mines . . .	100 0*	100 0*	99 0*	100 0*	101 0*	101 3*
Breyten Collieries .	12 0*	15 0†	—	—	—	—
Brick & Potteries . .	—	—	—	—	—	5 0*
Bushveld Tins . . .	0 9†	0 8†	0 9†	0 9†	0 8†	0 7*
Cinderella Cons. . .	—	3 0*	—	—	—	3 0*
City & Suburbans . .	14 6	13 9*	14 3	14 6	14 9*	15 0*
City Deeps . . . .	60 0†	60 0†	57 0*	57 6*	57 6	57 0*
Cloverfield Mines . .	8 9*	8 9	8 10	9 0	9 0*	8 10*
Clydesdale Collieries	12 0*	12 0*	—	—	12 0*	12 0*
Concrete Construct. .	4 0†	4 0†	3 6*	4 0†	3 6*	3 6*
Con. Investments . .	19 0*	19 0*	19 0*	—	21 0†	19 0*
Con. Langlaagtes . .	14 6†	14 0*	14 0*	14 6	14 6*	14 9*
Con. Main Reefs . .	—	14 0	—	13 9*	14 0	13 9*
Con. Mines Select. .	26 0*	—	26 6	26 0*	27 0*	—
Coronation Colls. . .	29 0*	29 0*	—	—	30 0*	—
Coronation Frees. . .	0 5*	0 7	0 6*	0 6*	0 7	0 5*
Crown Diamonds . .	2 0*	2 0*	—	—	2 0*	2 0*

\*Buyers. †Sellers. ‡Odd lots. §Ex London.

	Fri. 4th.	Sat. 5th.	Mon. 7th.	Tues. 8th.	Wed. 9th.	Thurs. 10th.
Daggafontein Mines	26 6	26 9†	—	26 6*	—	—
Dagga. Ops. (3yrs)	10 6*	10 6*	11 0†	10 9	—	—
Durban Road Dps.	—	—	—	—	16 0*	—
East Rand Coals . .	1 11*	1 11*	1 11*	2 1	1 11*	1 11*
East Rand Deeps . .	—	—	—	—	0 11*	0 11*
East Rand Minings	16 0*	—	16 0*	17 0*	—	16 0*
East Rand Props. . .	5 0*	5 6*	5 3	5 0*	5 0*	5 0*
East Rand Debs. . .	£58*	£58*	£58*	£58*	£58*	£58*
Eastern Golds . . .	1 1*	1 1*	1 1*	1 3†	—	1 1*
F. Smith Diamonds	3 3	3 2*	3 2*	3 2*	3 2*	3 2*
Geduld Props. . . .	39 3	39 6	40 0*	11 0	40 6	40 6*
Geldenhuis Deep . .	20 0†	—	—	—	20 0†	—
Glencairn . . . . .	—	—	—	—	—	1 0†
Glencoe Collieries . .	8 0*	8 0*	8 0*	—	8 0*	8 0*
Glynn's Lydenburgs	—	—	18 6*	—	20 0†	19 0*
Government Areas .	75 0	74 3	74 6	74 3	74 1‡	74 3
Jupiters . . . . .	—	—	—	3 9*	3 9*	3 9*
Kaalfontein Diam. .	—	—	—	—	0 3†	—
Klerksdorp Props. .	1 9*	1 9*	1 9*	1 9*	1 9*	1 9*
Knight Centrals . .	4 0	4 6	4 3*	1 0	3 9*	4 0*
Knights Deeps . . .	—	5 0*	—	—	—	5 0*
Lace Props. . . . .	14 3*	14 0*	14 3	14 3	14 6	14 3
Leeuwpoot Tins . . .	15 0*	15 0*	15 0*	15 0*	15 3*	15 0*
Luipaardsvlei Est. .	—	—	—	—	5 0†	4 6†
Lydenburg Farms . .	8 3	8 2	8 3	8 9	8 7	8 7
Main Reef Wests . .	2 8	2 6*	2 7*	2 8*	2 9*	2 8*
Meyer & Charltons .	—	—	—	—	100 0†	100 0†
Middelvlei Est. . .	—	1 0*	1 0*	1 0*	1 0*	1 0*
Modder B . . . . .	166 0*	—	—	—	—	166 0*
Modder Deep . . . .	140 0*	143 0†	143 0†	140 0	140 0B	140 0*
Modder Easts . . . .	21 7‡	21 7‡	21 10‡	22 3	22 0	22 0*
Modder Ops. (3yrs.)	7 4	7 4*	7 6*	7 8	7 4	7 4*
Modder Ops. (4yrs.)	8 5	8 6*	8 7*	8 6*	8 7	8 7
Natal Navig. Col. . .	18 6*	19 0*	—	—	—	19 0*
National Banks . . .	260 0†	260 0A	260 0†	258 0*	260 0†	250 0†
New Boksburgs . . .	1 2*	1 2*	1 3*	—	—	1 3*
New Era Cons. . . .	9 9*	9 6*	9 6*	9 9†	9 9†	9 6*
New Geduld Deeps . .	6 1*	6 1	6 5	6 2*	6 1*	6 2*
New Heriots . . . .	—	25 0*	25 0*	25 0*	25 0*	25 0*
New Kleinfonteins .	16 6*	17 0*	16 6*	16 6	16 9†	16 6†
New Modders . . . .	456 3*	457 6	452 6*	—	—	460 0†
New Rietfonteins . .	1 4*	—	1 4*	1 6*	1 6*	1 6*
Nigels . . . . .	—	2 3*	—	2 3*	2 3*	—
Nourse Mines . . . .	19 0†	—	19 0†	—	16 6	16 0*
Pretoria Cements . .	95 0	—	95 0*	—	96 0*	100 0†
Princess Estates . .	2 2*	2 2*	2 6	2 3*	2 6	2 5
Rand Klips . . . . .	9 3*	9 3*	9 6	9 6*	9 7*	9 8
Rand Nucleus . . . .	1 5†	1 3*	1 3*	1 4	1 3*	1 3*
Rand Select. Corp. . .	84 0*	85 6*	87 6*	89 6	88 6*	89 0*
Randfontein Deeps . .	—	4 3†	4 3†	4 3†	4 3†	—
Randfontein Ests. . .	12 3*	12 0*	12 3*	12 3*	12 3*	12 3*
Roberts Victors . . .	10 0†	—	—	—	—	10 0†
Rooibergs . . . . .	9 6*	9 6	9 4	9 4*	9 3*	9 3*
Rose Deeps . . . . .	18 6†	—	—	—	—	—
Ryan Nigels . . . . .	3 6†	3 6†	3 6†	3 6†	3 6†	—
Shebas . . . . .	1 4†	1 2*	1 3*	1 2*	1 2*	1 2*
Simmer Deeps . . . .	3 0†	2 0*	3 0†	3 6†	3 6†	—
S.A. Breweries . . . .	28 0†	28 0†	28 0†	28 0†	27 0†	27 0†
S.A. Lands . . . . .	6 0	6 0	6 0*	6 7	6 4	6 3
Springs Mines . . . .	67 0	66 3*	67 3	66 6	66 0	66 9
Sub Nigels . . . . .	22 9*	23 0*	23 0*	23 3	23 0	23 0†
Transvaal Lands . .	—	—	—	—	10 3*	14 0†
Trans. G.M. Estates	13 6*	14 0	15 0†	13 9*	13 6*	13 6*
Van Ryn Deeps . . . .	67 6	67 6*	68 0	68 0	68 0	68 6*
Village Deeps . . . .	—	20 0†	—	19 0	19 0	19 0†
West Rand Cons. . . .	4 3*	4 3*	—	4 3*	5 0†	—
West. Rand Estates	1 6*	1 6*	1 6*	2 0†	1 6*	1 6*
Witbank Colliery . .	47 0†	47 0†	47 0†	—	47 0†	—
Witwatersrands . . .	7 3*	7 0*	7 0*	7 0*	7 0*	7 0*
Wit. Deeps . . . . .	5 3*	5 4*	5 4*	5 4*	5 6*	5 7*
Wolluters . . . . .	8 7*	8 3	8 4*	8 5	8 6*	8 6*
Zaaiplaats Tins . . .	—	—	—	—	—	—
Union 5 per Cent. . .	£101‡	—	£101‡	£101‡	£101‡	£102

\*Buyers. †Sellers. ‡Odd lots. §Ex London.

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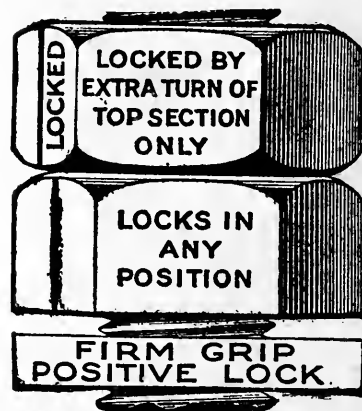
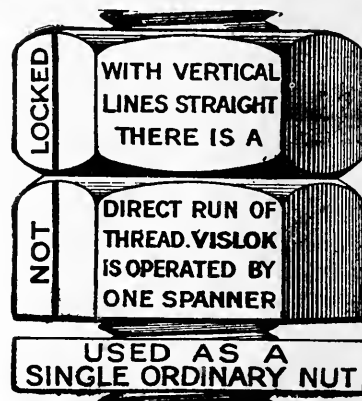
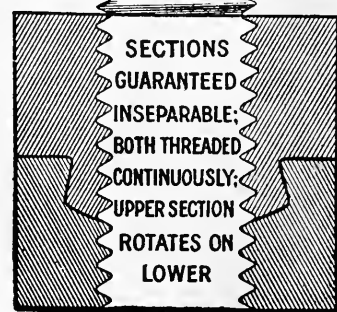
VISLOKS are used on places where Ordinary Nuts put on double would not remain locked for even a few hours, such as on shaking screens, eccentrics driving the same and those driving the washery plungers: eccentrics of small hauling engines and other places where there is considerable vibration. **WE HAVE FOUND VISLOK EXCEEDINGLY EFFECTIVE AND RELIABLE: IN FACT WE HAVE NOT HAD THE SLIGHTEST TROUBLE SINCE ADOPTING**

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## THE DECEMBER GOLD OUTPUT IN DETAIL.

### Small Decrease—Improvement in Native Labour Figures.

The December gold output of the Transvaal was declared this week at 722,419 ozs., of a value of £3,068,639, which is a small decrease of 420 ozs., in value £1,787, as compared with the return for November. An improvement in the output from the country districts appreciably reduced a decrease of over 1,100 ozs. in the Witwatersrand contribution. The figures of the December output were:—

Total	722,419 ozs.
Value	£3,068,639
Decrease	420 ozs.
Value	£1,787
Witwatersrand	697,137 ozs.
Value	£2,961,247
Decrease	1,134 ozs.
Value	£4,822
Outside Districts	25,282 ozs.
Value	£107,392
Increase	714 ozs.
Value	£3,035
Stamps	9,350
Decrease	10

#### THE CONTRIBUTING MINES.

	Value.	Increase.	Decrease.
Aurora West	£17,556	£480	—
Bantjes Consolidated	25,180	—	£1,912
Brakpan Mines	99,533	1,011	—
City and Suburban	36,352	—	3,317
City Deep	122,483	3,139	—
Consolidated Main Reef	41,203	217	—
Durban Roodepoort	12,399	650	—
East Rand Proprietary	151,257	—	3,025
Ferreira Deep	70,627	2,757	—
Geldenhuis Deep	60,709	—	1,588
Jupiter	27,398	—	990
Knight Central	27,644	229	—
Knights Deep	70,729	—	739
Main Reef West	30,528	—	625
Meyer and Charlton	44,669	2,187	—
Modder B.	99,580	493	—
Modder Deep	82,750	—	654
New Goch	16,337	—	743
New Heriot	20,937	1,121	—
New Modder	126,871	—	51
Princess Estate	25,584	—	2,455
Robinson	49,282	—	3,691
Robinson Deep	65,840	1,419	—
Roodepoort United	32,202	1,236	—
Rose Deep	62,442	—	6,639
Simmer and Jack	72,810	—	81
Simmer Deep	42,426	—	3,008
Springs Mines	66,401	—	722
Van Ryn	37,941	—	781
Village Deep	74,314	—	514
West Rand Consolidated	35,358	—	1,066
Wolhuter	39,767	862	—
Cons. Langlaagte	55,700	—	638
Crown Mines	208,135	4,329	—
Geduld Proprietary	59,099	1,784	—
Ginsberg	12,900	—	629
Glencairn	12,684	—	1,006
Government Areas	152,001	—	1,988
Langlaagte Estate	46,823	2,366	—
New Primrose	15,411	77	—
New Unifed	12,641	—	192
Nourse Mines	47,146	—	1,597
Randfontein Central	190,914	—	1,023
Van Ryn Deep	94,707	—	1,721
Village Main Reef	34,313	—	1,890
Witwatersrand	41,402	—	587
Durban Deep	41,076	7,001	—
Luipaardsvlei	21,124	98	—

	Value.	Increase	Decrease.
New Kleinfontein	82,903	5,560	—
Wit. Deep	37,452	123	—
Miscellaneous	5,707	1,911	—

#### OUTSIDE DISTRICTS.

Barrett	879	—	255
Sub Nigel	25,206	977	—
Glynn's Lydenburg	7,595	616	—
Sheba	7,217	480	—
Nigel	10,951	—	1,452
T.G.M.E.	29,810	768	—
Miscellaneous	25,734	1,901	—

#### LABOUR FIGURES.

The number of natives employed at the last day of the month by the W.N.L.A. and contractors were:—On gold mines, 172,740; on coal mines, 11,695; on diamond mines, 4,593; total, 189,028. The figures for November were: On gold mines, 169,083; on coal mines, 11,633; on diamond mines, 4,620; total, 185,336.

### Central Mining Rand Mines Group.

The following are the results of crushing operations of the Central Mining/Rand Mines companies for the month of December:—

Company	No. of Stamps Running.	Tube Mills.	Tons crushed.	Total Fine Oza.	Total Estimated Profit.	Estimated Working Costs per Ton.
Bantjes Cons. ...	90	3	20,170	5,928	£19 24/ 4/5	
City Deep ... ..	154	9	62,500	28,098	51,983 20/ 8/7	
Cons. Main Reef	110	3	25,520	9,700	11,898 22/ 3/4	
Crown Mines ...	660	26	157,000	48,999	44,005 20/ 4/1	
Dur. Rood. Dp..	100	3	25,200	9,671	7,038 26/ 3/9	
East Rand Prop.	820	25	131,000	35,609	12,762 20/ 7/8	
Ferreira Deep ...	280	7	42,300	16,627	18,799 23/ 9/5	
Geldenhuis Dp..	300	7	51,200	14,292	3,062 22/ 0/2	
Knight Central..	120	3	25,800	6,508	500 20/ 8/2	
Main Reef West	110	3	25,570	7,187	2,988 21/ 0/5	
Modder B. ... ..	396	6	41,600	23,443	57,339 19/ 3/7	
New Modder ...	180	7	54,000	29,868	65,656 21/ 8/3	
Nourse Mines ...	180	5	34,600	11,099	1,747 25/ 8/0	
Robinson ... ..	200	6	45,200	11,602	13,888 15/ 2/4	
Rose Deep ... ..	300	7	48,000	14,700	16,905 18/ 4/9	
Village Main R.	160	4	23,650	8,078	8,783 20/ 11/2	
Wolhuter ... ..	120	4	32,400	9,362	10,089 17/ 10/0	
Village Deep ...	180	7	48,000	17,495	15,641 23/ 5/4	
Wit. Deep ... ..	195	5	33,420	8,817	*1,054 22/ 7/8	

Tls. & averages 4355 140 927,730 317,083 342,048 21/ 0/6

A Includes 4 Nissen stamps. B Includes 16 Nissen stamps.

\* Loss.

*City Deep, Ltd.*—The City Deep treated 3,800 tons of slimes, yielding 737 ozs., of the estimated value of £3,037 and estimated profit of £2,395.

*Crown Mines, Ltd.*—Slight improvement in yield with lower working costs. Tonnage still much under capacity owing to labour shortage.

*Ferreira Deep, Ltd.*—Heavy fall of rock in No. 1 shaft will affect current month's hoisting.

*Nourse Mines, Ltd.*—Reduced profit due to severe labour shortage.

*Rose Deep, Ltd.*—Flooding due to heavy rains and labour shortage caused reduction in tonnage output.

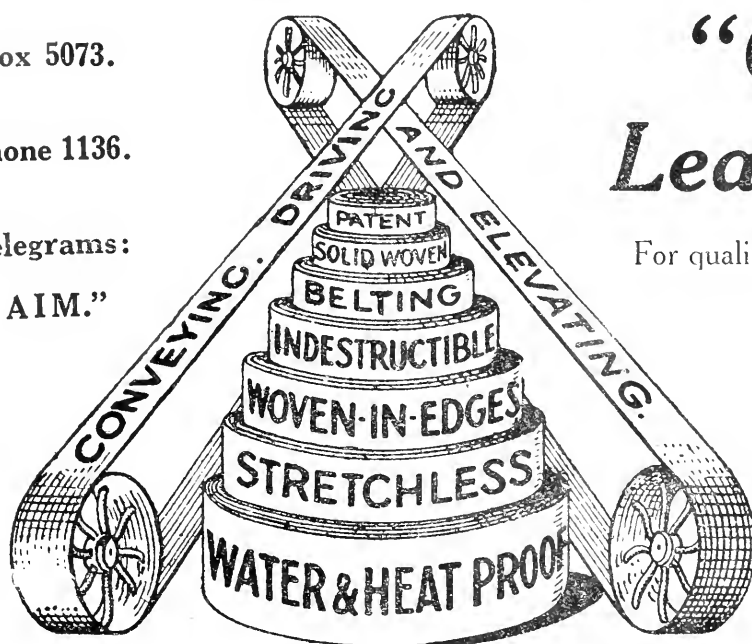
*Witwatersrand Deep, Ltd.*—Loss due to fall off in grade recovered.

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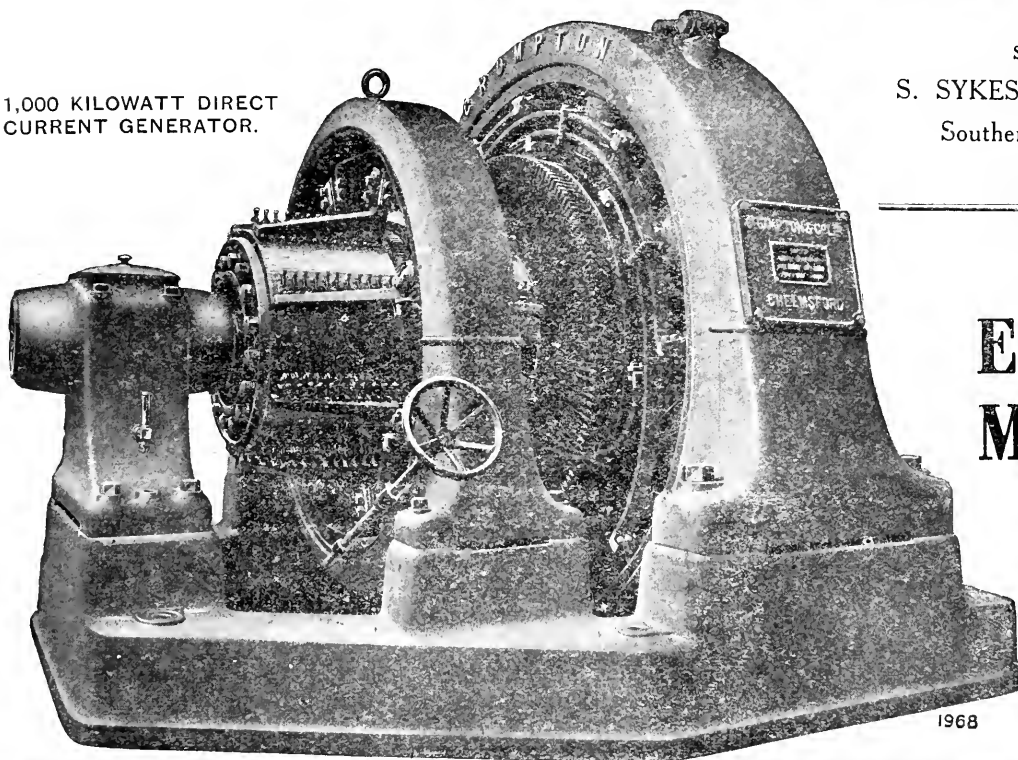
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Albu Group.

The following information is officially supplied regarding the December outputs of the producing mines of this group:

Company.	Stamps.	Tons Crushed	Total Cost.
Aurora West ... ..	80	11,600	£11,146
Meyer and Charlton ... ..	75	12,670	11,538
New Goch ... ..	120	17,550	11,809
Roo-de-poort United ... ..	80	28,869	29,083
Van Ryn Estate ... ..	140	35,100	28,309
West Rand Consolidated ... ..	100	36,070	33,928
	595	141,869	£131,813
Company.	Cost per Ton.	Total Revenue.	Profit.
Aurora West ... ..	19/ 4-5	£17,308	£3,162
Meyer and Charlton ... ..	22/ 11-4	43,962	29,424
New Goch ... ..	16/ 10-4	16,249	1,440
Roo-de-poort United ... ..	20/ 1-8	31,935	2,852
Van Ryn Estate ... ..	16/ 1-6	37,195	9,186
West Rand Consolidated... ..	18/ 9-8	34,958	1,030
		£181,907	£17,094

Barnato Group.

The results of operations of the Barnato group for December are as follows:—

Mine.	Stamps.	Tons Crushed.	Revenue from Gold
Consolidated Langlaagte ... ..	100	41,550	£55,702
Ginsberg ... ..	75	13,100	12,899
Glencairn ... ..	160	20,350	12,682
Government Areas ... ..	180	101,000	152,004
Langlaagte Estate ... ..	200	41,540	46,822
New Primrose ... ..	140	18,000	15,469
New Unified ... ..	60	13,360	12,641
Randfontein Central ... ..	600	162,090	190,916
Van Ryn Deep ... ..	80	41,260	94,707
Witwatersrand ... ..	215	32,765	41,402
Totals and averages ... ..	1810	484,925	£635,184
November totals ... ..	1810	496,800	£640,517
Mine.	Total Working Costs.	Working Costs per Ton Milled. Shillings.	Gross Profit including Sundry Revenue.
Consolidated Langlaagte .. ..	£40,850	19-662	£15,013
Ginsberg ... ..	12,450	17-659	537
Glencairn ... ..	12,301	12-089	512
Government Areas ... ..	93,972	18-608	58,550
Langlaagte Estate ... ..	37,587	18-097	9,512
New Primrose ... ..	13,681	15-201	1,802
New Unified ... ..	9,441	14-133	3,274
Randfontein Central ... ..	157,869	19-490	33,884
Van Ryn Deep ... ..	42,162	20-437	54,017
Witwatersrand ... ..	30,393	18-552	12,727
Totals and averages... ..	£450,706	18-588	£189,828
November totals ... ..	£458,009	18-438	£187,882

Monthly Gross Profits, 1917.—January, £232,859; February, £213,944; March, £225,477; April, £210,598; May, £200,264; June, £206,506; July, £203,650; August, £209,489; September, £197,556; October, £198,600; November, £187,882; December, £189,828.

Consolidated Mines Selection Group.

The following are the results of operations for the month of December:

	Stamps Working	Tons Milled	Working Cost per Ton Milled
Brakpan Mines ... ..	120	55,300	21/ 4-49
Springs Mines ... ..	60	29,000	21/ 6-92
Totals and averages ... ..	180	84,300	22/ 5-7
	Value of Gold declared	Yield per Ton.	Working Profit per Ton.
Brakpan Mines ... ..	£99,034	35/ 9-80	£39,934 11/ 5-31
Springs Mines ... ..	65,572	45/ 5-68	30,395 20/ 11-06
Totals and averages ... ..	£165,006	39/ 1-77	£70,270 16/ 8-06

Goerz Group.

Results of operations on the producing mines of this group for the month of December:—

Company	Stamps.	Tons Crushed.	Total Revenue.	Revenue per ton
Geduld Proprietary ... ..	80	39,000	£59,563	30/ 7
Modder Deep Levels ... ..	70	41,500	82,572	39/ 9
Princess Estate ... ..	60	17,500	25,743	29/ 5
Totals ... ..	210	98,000	167,881	—
Company.	Costs.		Profit.	
	Total.	Per Ton.	Total.	Per Ton.
Geduld Proprietary ... ..	£39,805	20/ 5	£19,758	10/ 2
Modder Deep Levels ... ..	35,178	16/ 11	47,594	22/ 10
Princess Estate ... ..	26,062	29/ 9	*316	—
Totals ... ..	£101,045	—	£66,836	—
	Less,			

Consolidated Gold Fields Group.

The following are particulars in regard to the outputs and profits for the month of December of the undermentioned companies of the Consolidated Gold Fields group:—

Company.	No. of Stamps.	Tube Mills.	Tons Crushed.	Gold declared, Fine Ozs.	Total Profit.
Simmer and Jack ... ..	320	7	55,900	16,441	£21,286
Robinson Deep ... ..	120	8	46,900	15,500	13,180
Knights Deep ... ..	400	11	93,500	16,651	5,004
Simmer Deep ... ..	220	10	43,600	10,568	4,039
Jupiter ... ..	80	5	22,300	6,150	4,505
Sub Nigel ... ..	30	1	10,050	5,764	8,510
Totals ... ..	1170	42	272,250	71,374	£56,524

Reserve Gold.—Simmer and Jack, 8,000 ozs.; Simmer Deep, 640 ozs.; Jupiter, 1,100 ozs.; Sub Nigel, 2,751 ozs.; total, 12,491 ozs.

The sundry revenue included in the above total declared profit is as under: Simmer and Jack, £1,500; Robinson Deep, £31; Knights Deep, £1,326; Simmer Deep, £472; Jupiter, £604; Sub Nigel, £22; total, £3,955.

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## PROGRESS OF THE SOUTH AFRICAN COAL INDUSTRY.—III.

### Points from the Annual Report of the General Manager of the S.A.R.

Notwithstanding the success of the Administration's efforts to assist in building up an export and bunkering trade in coal, there has been much criticism from certain quarters because the export and bunkering rates are so much more favourable than the rates on coal for local consumption, and also because the rates to Capetown are lower *per mile* than those to Durban. But, as I have previously remarked, the determining factor in fixing rates for shipment coal is the competition at consuming points with other sources of supply. If the rate be too high, no business accrues, and South Africa loses not only the railage but the profit resulting from the sale and handling of the coal. I trust, therefore, the absurdity of drawing comparisons between local and export or bunkering rates will come to be appreciated. Attempts made to bring pressure to bear to secure uniformity in export and bunker rates, or to reduce local rates to anything like the same level as export or bunker rates is harmful in that it restricts the Administration in its efforts to foster the coal industry. In South Africa where distances are great and population sparse the application of business principles is essential if industries are to be encouraged and stimulated. Local markets are inadequate for many of our products and if we are to find outside markets it will be at ruling market rates. The following extract from a memorandum by the General Manager of the Midland Railway embodied as an annexure to the report of the Board of Trade Railway Conference, shows the necessity for dealing with particular traffic on its merits, and also the possible effect of interference by those unacquainted with the conditions underlying the fixing of special rates:—

Competition between ports or localities will always remain an important factor. I can give an illustration of this, which will not only indicate what I mean, but will incidentally call attention to the origin of some of the anomalies that one is sometimes confronted with in railway charges, and show that they are not necessarily the outcome of the stupidity or malice of railway managers.

The port of Lynn competes with the port of Hull, especially in regard to coal traffic for shipment. It has many disadvantages as compared with Hull, both in regard to construction and access and egress. The Midland Company have for years been pressed by the Lynn authorities to so equate the shipping rates through Lynn as to make it possible for that port to reasonably compete with Hull. That has been the policy of the Midland Company, with the result that exceedingly low rates are in operation from Midland Collieries to the port for coal for export, and these rates are considerably lower than the rates in operation for coal to Lynn for local consumption.

Last year some person interested in Lynn became aware of the fact that whilst the rates for shipment from the Nottinghamshire and Derbyshire coalfields varied from 2s. 6d. to 2s. 10d., the Company were charging on coal from the same collieries for consumption in Lynn rates varying from 4s. 9d. to 5s. 6d. This he considered to be a hardship and injustice, and in order to bring pressure on the Company, obtained the assistance of a Member of Parliament, who, in the session of 1907, put down notice of opposition to the

second reading of the Company's Omnibus Bill of that session, although there was nothing in it but a reference to the port.

It was pointed out to the Member that the Company could not, on the Bill, discuss any such question with him, whereupon he said that he and several Members with whom he was associated would oppose the Bill as strongly as they could, and this action was taken.

Taking one colliery as an example, the rate for shipment is 2s. 11d., and for local consumption 5s. 5d. The distance from the colliery is 101 miles. The yield per mile on the shipping rate is 316d. Obviously it would be impossible for a Railway Company to live on rates generally based on such a low earning per mile, and therefore the only course open to the Company of redressing the supposed grievance would be to put up the shipping rate to the town rate, in which event Lynn, for the purposes of coal exportation, would be closed.

Experience indicated another matter which hampered the coal industry, particularly in local traffic. Prior to Union it had been the practice to rate coal according to the registered carrying capacity of the truck. In many instances this was found to be unfair for the reason that many of the trucks could carry loads considerably in excess of the weight of coal occupying the full cubic capacity of the truck. It was thereupon decided to charge on the actual weight of contents at forwarding station, provided the trucks were fully filled. The point was a small one, but the alteration had the effect of removing a genuine grievance, in some cases, and a minor source of irritation and dissatisfaction generally.

(To be continued.)

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### Mashonaland Agency.

The report of the Mashonaland Agency for the seven months ended 30th September, 1916 (the company having been incorporated on the 28th February, 1916, as a reconstruction of the company of the same name registered in 1891), states that operations resulted in a profit of £6,066, and the directors recommend a dividend for the seven months of 3 per cent., less tax. The directors also declared on 25th July, 1917, an interim dividend of 6 per cent., less tax, on account of the year ended 30th September, 1917, which was paid on 15th August, 1917. In the liquidation of the old company a distribution was made among the shareholders of 132,992 10s. shares of the Wankie Colliery Company, and from 28th February, 1916, to the present date that company has paid dividends amounting in all to 22½ per cent., representing £14,961 12s., equivalent to a dividend of 10 per cent. on the reduced issued capital of the new Mashonaland Agency. Land held by the company is of a total area of 440,511 acres, as compared with 449,518 acres held at 28th February, 1916. In view of the encouraging developments and the growing importance of the company's ranching undertakings, it was considered desirable upon the recent reconstruction of the Mashonaland Agency to wind up the Lochard Estates (Rhodesia) Syndicate and to work the Lochard ranch as part of the general business. Proposals for the further extension of the ranching business have recently been made jointly by the general manager and Mr. Stewart Richardson and have been approved by the Board, and as a result large areas of land adjoining the Lochard estate have been acquired, increasing the ranching ground in this vicinity to over 224,000 acres. The total income from rentals of farm lands for the seven months amounted to £1,650, a slight decrease, due to the difficulty, owing to the war, of obtaining agents to visit the outlying farms for the purpose of collecting native rents. The stands in the various townships owned by the company on the 30th September, 1916, numbered 76. The company took over 31 from the old company, and subsequently five stands were sold at a satisfactory profit. The buildings owned in the various townships are brought into the accounts at £6,569. The net rental derived from the stands and the buildings erected thereon, after deducting all charges, amounted to £1,547, equal to 20.46 per cent. per annum on the book value of the stands and buildings. Mining claims appear in the balance-sheet at £762. The company is not carrying on any mining operations on its own account, but claims are worked by tributors. Investments at 30th September, 1916, included the following:—Five per Cent. War Loan, Bwana M'Kubwa Copper, Kimberley Mashonaland Gold Mining, New Rhodesia District Development, Gold Fields Rhodesian Development, Rhodesia Broken Hill Development, Rhodesia Copper and General Exploration and Finance, Rhodesia Chrome Mines, Wankie Colliery Shares and Debentures, and holdings in other less well-known Rhodesian companies. Investments are brought into the accounts at £63,599, which represents the price at which they were taken over from the old company or purchased since. These investments at the date of the report showed a value considerably in excess of the balance sheet figure. Since the date of the accounts (30th September, 1916) the company has increased its holding in the Rhodesia Chrome Mines and the Wankie Colliery Company.

and has acquired substantial interests in the following Rhodesian and South African undertakings:—Rhodesia Lead and Zinc Syndicate, Rhodesia and General Asbestos Corporation, Victoria Falls and Transvaal Power Company. At the present time operations are of the estimated value of upwards of £123,000. Despite some check in progress caused by the war, no real setback has been experienced by Rhodesia. As regards the mineral industries, the output has been generally maintained, and even in some directions has been increased. In the ranching districts the herds of cattle are growing into large figures, and the products from farm lands, particularly the maize crops, are providing important tonnage for export. Mr. H. Wilson Fox, M.P., is the director retiring; but owing to increasing amount of business and his Parliamentary duties, has decided not to offer himself for re-election, and the directors recommend that Mr. Robert Littlejohn be elected to fill the vacancy.

### South African Investment.

A final dividend of 1½ per cent. is announced by the South African and General Investment and Trust Company, making 3 per cent. for the year, comparing with 2½ per cent. for 1915-16. A sum of £1,000, against £3,000, is to be set aside for depreciation of investments, and £1,821, in contrast with £1,537, will be carried forward.

Dividends on Rhodesian shares declared during last year constitute a record. Those on mining shares amount to £691,260, as compared with £641,981 in 1916; while the development companies paid out £154,232, as compared with £33,772.

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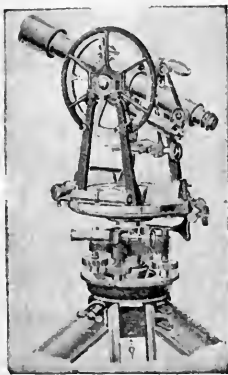
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### NOTICE TO SHAREHOLDERS.

NOTICE IS HEREBY GIVEN that the Twentieth Ordinary General Meeting of Shareholders in the above Company will be held on Tuesday, the 26th day of March, 1918, at 11.15 a.m., in the Board Room, Lace Building, Johannesburg, for the following purposes:—

1. To receive and consider the Balance Sheet, Profit and Loss Accounts, and Directors' and Auditors' Reports for the year ended 31st December, 1917.
2. To confirm the appointment of Mr. W. J. Gau in place of the late Mr. J. H. Ryan, and to elect two Directors in place of Messrs. Llewellyn Edwards and Julius Jeppe, who retire in rotation, but, being eligible, offer themselves for re-election.
3. To appoint Auditors for the ensuing year, and to fix the remuneration of the Auditors for their past services.
4. General Business.

The Transfer Books of the Company will be closed from the 19th to the 26th March, 1918, both days inclusive.

By Order of the Board,

T. L. DAY, Secretary.

Lace Building, 74, Fox Street,

Johannesburg, 8th January, 1918.

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**THE WEEK IN THE MINING MATERIAL AND ENGINEERING TRADES.****Business Inactive—The Shipping Trade—Chemicals and Dynamite—Linseed Oil and White Lead Position Improving—Iron, Steel and Bronze—Timber and Buildings.**

The absence of buoyancy or activity in business is most marked. The never-ending rains may have something to do with the deadness, as this is not the bright sunshiny weather for South Africa at this season of the year. For example, the South African timber trade is practically hung up because in most parts of the country the ordinary road transport cannot negotiate the heavy and damaged roads until they are repaired, if ever so roughly, after the immense damage done by the floods. Nearer home the building trade in Johannesburg is very much upset on account of the stoppage of brick making in consequence of the incessant rains. In urgent cases we are drawing upon the Boksburg, Zuurfontein and other brick yards as a temporary measure to keep important jobs going. The damage done to the potato and maize crops on the low-lying lands is of such importance that it requires a passing mention, as it means loss, and so less demands eventually from the agriculturists for implements and machinery. However, it may be that the high veld "dry" farmers will more than counter-balance the position by their fine crops.

**THE SHIPPING TRADE.**

No fewer than three English mails have arrived during the past week or ten days. Each brought good general cargoes, comprised mostly of drapery, soft goods, clothing and boots. In a cursory glance at the manifests of cargo, drapery and soft goods were altogether the predominant feature. Chemicals, chiefly household, came well to the front, also an immense lot of safety fuses for the mines, hospital sundries, stationery, wines and brandies from France, a few cases of steel shaftings, as well as the smaller odds and ends so necessary for fill-ups for the retail trades. In addition to these British ships, two American boats recently arrived with general cargoes. There was a record shipment of calcite and muralo destined for Johannesburg, which had been lying on the New York wharf since February, 1917. There was also some galvanised iron, linseed oil and white lead, as well as a composite lot of American and Canadian goods.

One of our largest mail boats has been diverted to another trade and the steamers from America to the Cape usually do not return there.

**THE MINES SUPPLYING BOOTS.**

There is still a jarring note in commercial circles in reference to the mines supplying boots to natives. Therefore when an opportunity offered itself to ascertain the other side of the story, it was taken. It appears that since the question arose as between the Government Native Labour Department and the Chamber of Mines, no fewer than eight different kinds of mining boots have been practically standardised. The prevailing idea was to get a boot to withstand the acids in the mines, therefore after much testing by the practical means of wear and tear this has been accomplished, obviously up to a certain point. The

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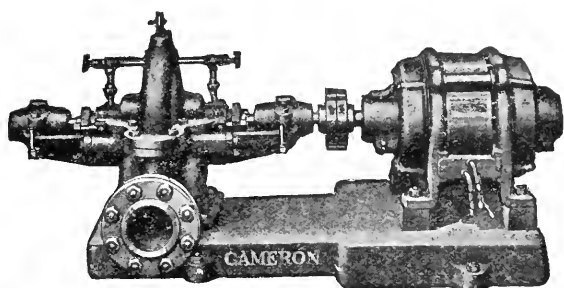
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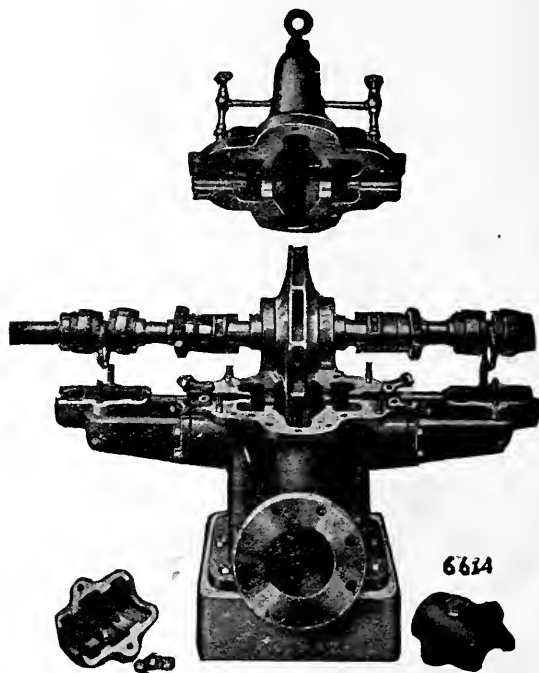
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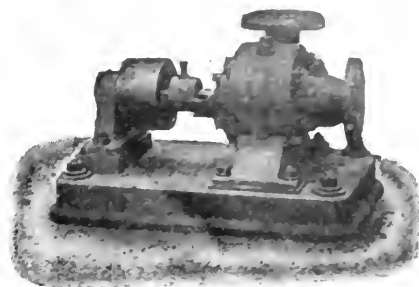
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interested party certainly made a good case out, that the underground workers should have the best class of boots procurable to provide against damage to the feet, which are so liable to be hurt and poisoned when the natives are at work, hence more or less time is spent in the hospitals in consequence. However, statistics now prove that since the natives have worn boots the matter of hospital treatment has considerably decreased. The natives are not compelled to purchase boots from the mines but are free to do what they like in that respect and in some things they are not so amenable as the ordinary white man, therefore if they make up their minds to buy from a storekeeper, for all practical purposes they will not be otherwise persuaded. But in all fairness the mines have the advantage over the storekeepers at the moment, as the former sell at cost price and give credit. Obviously the merchants contend that if one thing is sold on those lines, why not others? However, the merchants hitherto have been able to keep the mines in check and maybe now that a miners' boot industry has been thoroughly established in South Africa the storekeeper may eventually come into his own again through competition amongst the manufacturers. It is very certain that the mines for their own sake will insist upon the underground workers being properly shod, therefore the question of distribution is a secondary consideration. For example, the mines had to send to America to purchase steel plates and other mining essentials, also contract in the early days for mercury and other chemicals, and it is not too much to say that if these necessary precautions had not been taken Johannesburg as a whole would not be in the prosperous state that it is to-day. The boot question is an important mining essential to-day, and it is to be hoped that the distribution may be met after the war period, because so far the mining authorities have shown a desire to remove all obstacles to make things run smoothly.

## CHEMICALS AND DYNAMITE.

Thanks to the mines' foresight, they have twelve months' supply of mercury and cyanide, and, as previously remarked, large quantities of chemicals came out from London by the last mails. The supplies from Japan have not been so constant of late owing to shipping troubles, for although orders have been placed in Yokohama nearly twelve months ago, the various chemicals have not yet been delivered in South Africa. The supplies also from America are very uncertain in consequence of the intermittent shipping arrangements, and no definite news can be ascertained in respect of the future, which seems very problematical. As regards dynamite no fears need be entertained that anything will occur for the next few months. It was previously mentioned in these notes, on the subject of glycerine, that supplies might come from the Inhambane district, and this is what the Lourenco Marques *Guardian* says — "Two representatives of the Union Government and Chamber of Mines have been here inquiring into the possibilities of obtaining glycerine for the Union mining industries. It appears that glycerine from overseas has been restricted from 480 tons monthly to 280. Apparently the best raw material for the production of glycerine is mafurra, which grows wild and largely in the Inhambane and Chai Chai districts of

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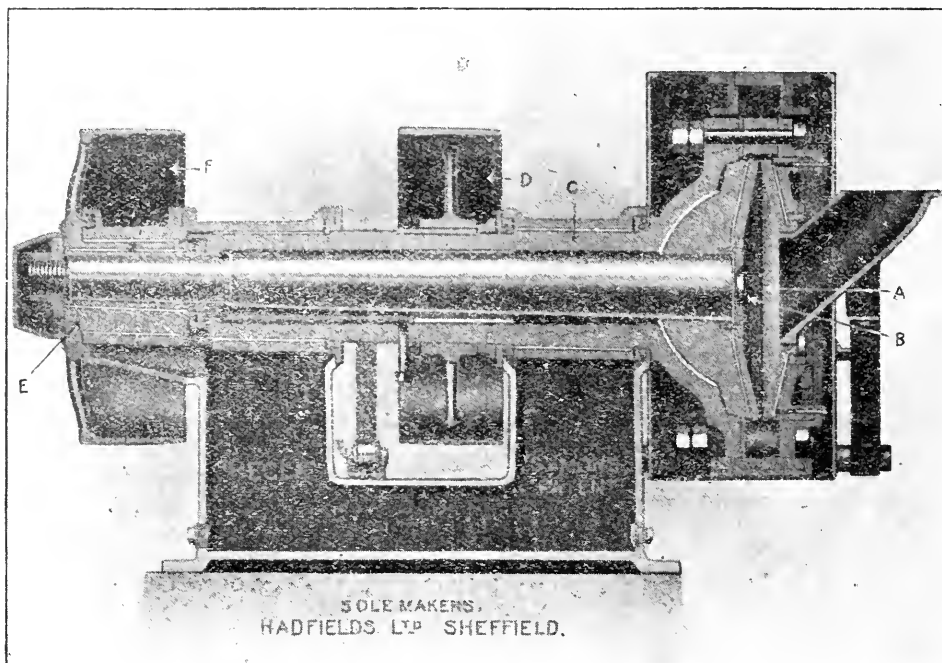
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the Province, and with the necessary extensions the Mozambique Soap Oil Company could treat 2,000 tons monthly, giving about 100 tons of glycerine, but leaving a huge quantity of oil which, in the absence of shipping, could not be disposed of. If, as seems possible, the Union would also buy the oil, storing it until after the war, this company would be prepared to increase its plant at a cost of £100,000. On this basis something like £200,000 would go in the collection of mafurra alone. The company some time ago commenced extensions so as to produce glycerine, but these operations were based on that quantity of oil that could be disposed of."

#### VARIOUS INDUSTRIES.

There are ever on the increase and according to the whisperings one hears people are ever on the alert to introduce others, as capital is in plenty and enterprises for an outlet for money and activities are at a low ebb. It is reported that the Hatherley glass works are likely to start up again. The carbide industry is being delayed through plant difficulties, which are customary in most new enterprises in their initial stages. It is said that more than 50 per cent. of our litharge, chloride of lime, manganese dioxide and fluorspar are being put on the Johannesburg market by local houses. It has been suggested that caustic soda might be a good line for local manufacture. With the fine workable clay found in the Transvaal, clay crucibles and liners have for some time past been entirely produced by local pottery companies. It is expected that in the near future plumbago crucibles will be manufactured here out of our deposits of graphite, which have already been made use of in our various local manufactures.

#### IRON, STEEL, BRASS AND BRONZE.

According to the mail matter received this week, a brass and bronze works ask to be excused from quoting, as the War Office is taking nine-tenths of their output of brass and gun-metal. A large factory for piping replied in a similar strain, remarking that the Government people are practically superintending the whole of their output of the larger sized pipes and tubings. However, as a portion of the contract for Johannesburg had not been completed, that would be done at the first opportunity and their shippers advised. American agents seem out of the market at the moment for piping, but Canada can supply certain sizes subject to shipping facilities. Galvanised iron is cheaper, as supplies are fairly plentiful with less demand. There was a statement made of some sizes being only 1s. 6d. per foot, but this must be for 26 gauge in the shorter lengths. The recognised standard 24 gauge is from 1s. 9d. to 2s. per foot according to length, but slow of trading even at the lower level of rates. Steel plates are still exceptionally scarce in sizes required for foundry and engineering shop work. For imported bar iron and mild steel, the demand is only normal—an absence of anything like activity.

#### TIMBER AND BUILDINGS.

According to the statistics of the Johannesburg Municipality, there were 226 plans passed for the month of November and 214 in December. The estimated costs are £85,918 and £82,587 respectively. The price of timber is 1s. 6d. to 1s. 7d. per foot for deals, but this seems a little high, because rates are not uniform throughout the timber yards in Johannesburg. It is said that some importers have purchased cargoes in London which come out cheaper than from Sweden, owing to the high exchange rate between Stockholm and London, which by dealing in London the exchange is minimised. Stocks are good in Johannesburg, but the yards are chary about quoting for large quantities for outside places other than the Reef.

#### THE OIL AND COLOUR TRADE.

The linseed oil position has been relieved from the acute stage, as a rather large quantity came into the market from a factory which is not pushing its output of mixed paints,

as some of the essential ingredients are so scarce and dear. It is also stated that supplies of linseed oil and white lead have come in from America, as two ships arrived at the Cape from there last week. The outlook is more assured because both white lead and linseed oil are now located and it is only a matter of freight, which although no secondary question, is one that seems to come right every now and again.

#### ELECTRICAL GOODS.

The absence of any outstanding contracts coming out, which is usual at this time of the year, is rather pronounced. The ordinary wiring of houses is done as a matter of course, but that is slow because the Municipality cannot give more light connections, owing to their present plant being fully loaded.

#### VARIOUS COMMERCIAL ITEMS.

The prices of motor petrol are: Shell and Pegasus, 35s. 6d. per case and 4s. 9d. per gallon; Zenith, 36s. 6d. and 4s. 9d. respectively. No plate-glass has arrived yet, although expected last month. Wallpapers had a further advance in London according to the latest cables. It is pleasant to know that a small company requires a mining plant; however, it is also reported that another company is likely to be inconvenienced owing to the latest order from the British Government placing an embargo on sending moneys away for company purposes. Assay balances are acutely scarce, and the prospects of obtaining them from overseas are very remote.

#### REVISED PRICE LIST.

**BUILDING MATERIALS.**—Timber: Deals, Baltic, 9 x 3, 1s. 6d. to 1s. 7d.; flooring, 4½ x ¾ and 6 x ¾, 9½d. to 9½d. per square foot; flooring, 4½ x 1½, 9½d.; and 6 x 1½, 9½d.; ceilings, 6 x ½, 5½d. to 5½d. per square foot; pitch pine, 8s. 6d. per cubic foot; Oregon, 7s. per cubic foot; clear pine, ½ in. x 12 in., 1s. 1d. per foot; lin. x 12 in., 1s. 5d.; teak, 17s. 6d. to 18s. 6d. cubic foot; shelving, 1s.; jarrah, 12s. 6d. c. ft.; poplar, 1 in. x 12 in., 1s. 3d.; scantling, 1s. 5½d. to 1s. 6½d. ft.; beaver boards, 6d.; galvanised iron, 24-gauge, 5ft. to 10ft., 1s. 9d.; 11ft., 1s. 10d.; 12ft., 2s.; 26-gauge, 6ft. to 8ft., 1/6, 1/7; 9ft. and 10ft., 1/8; flat galvanised, 24-gauge and 26-gauge 125s. 100 lbs.; floor brads, 52s. 6d.; ceiling, 47s. 6d.; wire nails, 47s. 6d. to 55s. per 100lb.; locks, rim, 66s.; mortice, 70s. per dozen; steel ceilings, 75s. to 80s.; roofing material, 1 ply, 40s.; 2 ply, 47s. 6d.; and 3 ply, 57s. 6d. per roll.

**BRICKS, CEMENT, LIME, ETC.**—Pretoria Portland Cement, 9s. 3d. bag; 8s. 3d. truck loads; lime, white, unslaked, 7s.; truck loads, 6s.; slaked, 40s. 5s.; blue, 3s. 9d.; plaster lime, 4s. 6d.; bricks, stock, delivered, 60s. to 65s.; wire cuts, 60s. to 75s.; pressed, 70s. to 80s. per 1,000; road transport expensive when obtainable; salt and white glazed bricks, £35 per 1,000; roofing tiles, £17½ to £27½ per 1,000; glazed tiles, 10s. 6d. to 17s. 6d. per yard; paving cement tiles, 8s. 6d. per yard laid; reinforced concrete columns, 6 ft. plain, 22s. 6d., fluted, 24s.; fireclay bricks, £7½ to £9½, at kiln, per 1,000; clay chimney pots, 36s. to 70s., according to height, 12 in. to 18 in., per dozen.

**OILS, PAINTS, LEAD, OXIDE, GLASS.**—Linseed, raw and boiled, 13s. per gallon; white lead, 1s. 3d. per lb. and 1s. 1d. in big lots;

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GREASE.—Imported, A.F. axle, £30 to £32½; local, £24 to £26 per ton; tallow (local), 6d. per lb.; White Rose paraffin, 19s. 4d. 2/4; Laurel paraffin, 19s. 1d.; petrol, 35s. 6d. to 36s. 6d. 2/4 I.M.P.; motor oil, 7s. to 7s. 6d. per gallon; engine lubricating oils, 30s. to 40s. per case; cylinder, 30s. to 42s. 6d.

CHEMICALS.—Mercury, £55 to £60 75lb. bottle last sale, but now no definite price; bichromate potash, 5s. 6d. lb.; chlorate, 4s. 6d. per lb.; permanganate, 14s. lb.; alum, 6d. lb.; carbolic acid, 7s. 6d. lb.; borax, 100s. 100lbs.; cyanide sodium, 1s. 3½d. to 1s. 5d. lb.; hypo, 9d. lb.; acetate lead, 77s. 6d. 100lbs.; litharge (assay), 70s. to 72s. 6d. (commercial), 58s. 6d. 100lbs.; zinc sheets and blocks, 1s. 9d. lb.; locally-smelted zinc, 6½d. lb.; plumbago crucibles, 5d. per number.

ELECTRICAL GOODS.—Lamps, high volts, British, Holland and American, 30s. to 36s. wholesale, and 48s. to 54s. doz. retail; carbon lamps, 12s. 6d. doz.; pure rubber flex, 6d. to 8d. yd.; 3/20 coils wire, 42s. 6d. to 45s.; do., 3/22, 25s.; 7/22, 48s.; 7/20, 75s.; 7/18, 85s.; tubing, 18s. to 20s. per 100 ft.; keyholders, 6s. to 7s. 6d. each; round blocks, 3½in., 4s. dozen; lamp holder cord grips, 13s. 6d. to 15s. per dozen; switches, 5 amp., 42s. to 48s. per dozen; British glass shades, 30s. to 40s. dozen; porcelain shackles, 15s. to 18s. dozen; do., bobbins, 15s. to 25s. per 100; cleats, 22s. per 100; P.O. insulators, 18s.; motor, 3 h.p., about £35 to £37, new.

IRON.—Imported, ½in. and ¾in. round, 9d. to 10d. lb.; ½in. round, 72s. 6d. to 75s. 100lb.; ¾in. round, 47s. 6d. to 50s. 100lb.; 1in. upwards, round, 32s. 6d. to 40s. per 100lb.; square iron, 35s. 100lb.; flat iron, small shoeing sizes, 45s. to 50s.; flat, average width and thickness, 35s. to 40s.; round iron, local ¾in. upwards, 32s. 6d. per 100lb.; square iron, local, ¾in. upwards, 25s. 6d. per 100lb.; flat iron, average widths and thickness, 25s. 6d.; mild steel bar, 6½d. to 9d. per lb.; drill, 10d. to 1s. per lb.; steel plates, 70s. to 80s.; some sizes unobtainable; hexagon and cuphead bolts, ½in. diameter, 2s. per lb.; 5-16in. diameter, 1s. 9d. per lb.; ¾in. diameter up to 3in. long, 1s. 6d. lb.; ¾in. dia., 11d., 3½in. and up long, 1s. lb.; ½in. dia. up to 2½in. long, 70s. 100lb.; ¾in. dia. and 2½in. up long, 70s. per 100lb.; ¾in. diameter up to 2½in. long, 75s. per 100lb.; 2½in. dia. 2½in. and up long, 57s. 6d. per 100lb.; ¾in. diameter, 2½in. and up long, 55s. 100 lb.; ¾in. and 1in. diameter, same price as ¾in. diameter; nuts, ¾in., 1s. 3d. per lb.; ½in., 82s. 6d.; ¾in. to 1½in., 75s.;

1½in. and 1½in., 85s.; 1½in. to 1½in., 87s. 6d.; 2in. up, 72s. 6d.; washers, all sizes, 45s.; rivets, 3-16in., 1s. 6d. lb.; ¼in., 5-16in., 1s. 6d. lb.; 7-16in., ¾in., 1s. lb.; ½in., 1s. lb.; ¾in., 62s. 6d.; ¾in. up, 60s. 100 lb.; shoes and dies, 32s. 6d. to 35s., 100lb.; rails, £25 per ton; picks, 4lb., 40s. per doz.; shovels, 65s. to 70s. per doz.; drill hammers, 5½d. to 6d. per lb.; hammer handles (best American), 14in., 4s.; 24in., 10s.; 30in., 13s.; 36in., 16s. per dozen; metal, anti-friction knoxite, 10d. to 3s. 6d. per lb.

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## The Week's Meetings.

### MAIN REEF WEST, LTD.

An extraordinary general meeting of shareholders in the Main Reef West, Ltd., was held in the board-room, Corner House, on Jan. 4, for the purpose of considering resolutions winding up the company and approving of the provisional agreement with the Consolidated Main Reef Mines and Estate, Ltd.

Mr. Max Honnet presided.

The Chairman said:—You will, no doubt, have made yourselves fully acquainted with the details of the proposals submitted for your consideration to-day; I will, therefore, not detain you very long before I ask you to give your assent or otherwise to the resolutions I shall shortly propose for the sale of our undertaking to the Consolidated Main Reef Company. As you know, your property and assets are bonded to the debenture holders, to whom you are still indebted to the extent of £250,000, carrying interest at the rate of 6 per cent. per annum. An essential condition to the ratification of the provisional agreement therefore is the consent of the debenture holders, and in this regard I am pleased to be able to inform you that at a meeting held in London on the 14th of December the debenture holders, by a unanimous vote, approved of the sale of the company's assets on the terms set forth in the provisional agreement. It now remains for you, the shareholders, to decide whether or not you will do likewise. The company's position has been made quite clear to you in the circular issued some time ago, and particularly in Mr. D. Wilkinson's report which accompanied that circular; and, when addressing you a month ago at our annual meeting, I also took a further opportunity of giving shareholders the latest information as to our general position at the time and our prospects for the future. You will have realised that if we are to continue our existence as a separate mining company with any hope of success, we must raise further large funds for opening up the lower untouched portion of our property, and we must raise such funds quickly. Our development results for the past few years have been very disappointing, as you have been fully advised from time to time, but we—that is, your Board of Directors—have by no means lost faith in our mine. It is almost entirely a question of money. With our present cash resources, and bearing in mind the obligations we have to meet for debenture redemption (£25,000 per annum) and debenture interest (£15,000 per annum), it is quite impossible for us, as Mr. Wilkinson states in his report, to carry out the vigorous development policy—wherein lies our only hope of salvation—at a pace sufficient to maintain our ore reserves and at the same time continue to mill sufficient ore to produce the profit required to pay our way and meet the heavy capital expenditure which would have to be incurred. If we attempted to follow the only policy that would save us, i.e., of opening the mine in depth, with the means at our disposal to-day, it is clear that we would not only fail to pay our way, which in itself would most probably exhaust our remaining ore reserves long before we

would be able to open up any considerable portion of our southern claims and thus come to a standstill automatically. In other words, having neither the money at present nor, under the circumstances, the time in which to do the work which is essential before our present ore reserves become exhausted, we would simply be compelled to stop all development at once and work the mine, as long as it will yield profits, for the benefit of the debenture holders.

### The Amalgamation Proposal.

Now, what are the prospects of raising any considerable sum of money to-day? Speaking for the board I can only say that, taking our own circumstances into account, as well as the general condition of the money markets open to us, with the restrictions upon movements of capital necessarily imposed by a state of war, we consider the prospects of successfully raising sufficient money to put this company on its feet to be so very remote that we have not thought it worth while to even make an attempt to do so. Under the circumstances, and seeing that we are to a certain extent in partnership with them already, we gladly availed ourselves of the opportunity of discussing the possibility of an amalgamation with the representatives of the Consolidated Main Reef Company. The agreement provisionally concluded between the boards of the two companies is the outcome of a good deal of negotiation and represents a transaction which was considered fair and acceptable to both sides. The agreement provides that we shall hand over our property and all our assets for 323,233 Consolidated Main Reef shares, of which 225,000 shares will be allotted to the trustees for the debenture holders and 23,233 shares to the liquidators of this company. These shares, which will rank *pari passu* with the existing Consolidated Main Reef shares in every respect, save that they shall be entitled to only one half of any dividend declared by that company for the half year ending 31st. December, will be distributed in due course to the debenture holders at the rate of nine shares for every £10 nominal value of debenture stock and to the shareholders at the rate of one share for every five Main Reef West shares held. Your directors have no hesitation in recommending you to accept these terms and accordingly I now beg to move:—

(1) That it is desirable to wind up this company, and accordingly that this company be wound up voluntarily, and that Maximilian Honnet, Richard Goldman, Evelyn Ashley Wallers, John Munro, William Philip Fisher, Paul Dreyfus, Arthur Francis Mullins and Frank Raleigh be and are hereby appointed liquidators for the purpose of such winding up, with full authority for any two of them jointly to act without the concurrence of the others of them, and that their remuneration be and is hereby fixed at £950.

(2) That the provisional agreement entered into on the 7th day of August, 1917, between this company and the Consolidated Main Reef Mines and Estates, Ltd., and submitted to this meeting, be and the same is hereby approved, and the liquidators appointed by this meeting or any two

of them are hereby authorised to adopt the said agreement and carry the same into effect and to receive a compensation for the transfer or sale of the property and assets of this company, as contemplated in the said provisional agreement, for distribution among the members of the company 93,233 (ninety-eight thousand two hundred and thirty-eight) shares of £1 each in the capital of the Consolidated Main Reef Mines and Estate, Limited, increased to £1,247,602, as provided in the said provisional agreement. (3) That the draft provisional agreement expressed to be made between the trustees for the debenture holders of this company, of the one part, Consolidated Main Reef Mines and Estate, Ltd., of the second part, and this company of the third part, and submitted to this meeting, be and the same is hereby approved, and the liquidators appointed by this meeting or any two of them are hereby authorised to adopt the said agreement and carry the same into effect.

Mr. W. P. Fisher, in seconding the motion, said: I would like to say that in common with my fellow directors I have viewed for the last few years with feeling of increased apprehension and alarm the nature of the development of the mine I must confess I have been a bit of an optimist so far as the position of the mine is concerned, because we know at one time it contained exceedingly good values, but I regret to say that our hopes were frustrated. It is true, as the chairman says, that we might have gone on for the next couple of years exhausting the ore reserves, but this would have benefited nobody, least of all the shareholders because there was no prospect of shareholders receiving any dividend. It is true also that under happier auspices an appeal might have been made to the shareholders to raise the extra funds required for further exploration work, but in the midst of a world-wide, devastating war, and with the money market as it is, the prospects in this direction are absolutely hopeless. All things considered, I think the board were wise in entering into this agreement, and I think that they have done the best in the interests of the debenture holders and the ordinary shareholders. The latter, it is true, get but a small proportion of the money which their shares represent, but I think it is better to save a little out of the wreck than to get nothing at all.

The resolutions were carried unanimously.

### CONSOLIDATED MAIN REEF.

Following the meeting of shareholders in the Main Reef West, Ltd., at which the agreement with the Consolidated Main Reef Mines and Estates, Ltd., was ratified, a meeting of shareholders in the latter company was held in the board-room of the Corner House. Mr. Max Honnet presided.

The Chairman said: You are met here to-day to consider a proposal put forward by the board for the purchase of the property and assets of the Main Reef West, Ltd. By this time you will all no doubt have made yourselves familiar with the terms

and conditions of the provisional agreement entered into between the boards of the two companies, communicated to shareholders by circular in October last, and before asking you to vote on the resolutions, I desire to say a few words in support of the board's recommendation to you to ratify this agreement. In the first place, although the report of Mr. D. Wilkinson, our late consulting engineer, shows very clearly the advisability of this amalgamation, I would like if possible to emphasise this consideration. You know that we are already very closely associated with the Main Reef West. For years past we have shared with them one general manager, one set of surface officials, and have owned and used jointly certain buildings which are as necessary to the one company as to the other, with obvious advantages to both parties. This arrangement now stands in danger of dissolution owing to the somewhat precarious position of the Main Reef West. I need not enter into detail, for your directors, after careful investigation, are satisfied that, unless the Main Reef West can raise a considerable sum of money with which to open up their deep level claims, they must be forced, within a comparatively short period of time, to close down their operations—with serious consequences to us. We are equally satisfied that under prevailing conditions the Main Reef West will not be successful in securing the requisite capital, and accordingly we have to take steps to protect our own position. Mr. Wilkinson went thoroughly into the matter of costs on the existing basis, and states that if the Main Reef West were closed down the additional cost to the Consolidated Main Reef, on our normal basis of 28,000 tons milled per month, would be "more than 1s. per ton," and, using the figure of 1s. per ton only for the purpose of his estimate of the value of the Main Reef West to us, he shows that the loss we will incur over a period of three years amounts to £50,400, which sum, after allowing for Government taxes, has a present value of £37,100. Of course, if we take over the Main Reef West this loss will be saved so long as the combined areas continue to yield a tonnage well above the 28,000 used as the normal basis of the Consolidated Main Reef, which we trust will be for many more than three years; but in addition to this I may inform you that the estimate which Mr. Wilkinson made indicated that should the Main Reef West be closed down the costs on the Consolidated Main Reef, working alone, would be increased by no less than 1s. 10d. per ton at first, which could no doubt be reduced somewhat after a while, but which would nevertheless remain well above the figure of 1s. per ton assumed in his calculations.

### The Saving.

I mention this to show that the sum of £37,100 (present value) which we estimate to save on costs (over three years only) by taking over the Main Reef West to-day, is very conservatively calculated and that actually we may reckon the saving at an appreciably higher figure; and this, as Mr. Wilkinson says, is the strongest reason for making the purchase. At all events—to put the point another way—it will be patent to you that if we do not take over the Main Reef West we will pay away in extra costs,

as soon as that company falls out, from our own money, at least £16,800 more per annum than we have been doing in the past, and that this increase in costs will continue indefinitely. Next, there is the question of capital expenditure. Our own cyanide plant is incapable of treating 30,000 or even 28,000 tons monthly with satisfactory residues from ore of the grade supplied by our mine. To rectify this it will be necessary to enlarge the plant within the next year or two at a cost of some £25,000, which has a present value of about £20,000. By taking over the Main Reef West, which has spare treatment capacity, we will not only avoid the expenditure of this comparatively large sum of money, but we will, from the moment that the two plants operate as one, make a saving or extra profit of at least 4d. per ton by securing lower residues. Over a period of three years, on the basis of treating 28,000 tons a month, and allowing for taxation, this improvement of 4d. per ton in residues amounts to £14,600, which represents a present value to us of £12,400, and here again, I may say, the saving is conservatively estimated. Then there are the buildings that are now owned and used jointly by the two companies. These are, of course, essential to the continuance of our own work, and if the Main Reef West dropped out we would have to spend in acquiring that company's portion of the buildings a sum of money to which Mr. Wilkinson assigns a present value of £20,000.

### Amalgamation Desirable.

The considerations I have just stated will serve, I think, to convince you that this amalgamation from our point of view is most desirable, and we must now consider whether on the terms proposed we are making a good bargain or not. Dealing with the mine first, which is the most important of the assets to be taken over, Mr. Wilkinson, you will have seen, gives it a present value of £103,165. For the purpose of his valuation he takes the profits from ore in sight (principally down to the 14th level), as well as from the probable ore on the 15th and 16th levels, and gives to these profits a value, obtained over three years, of £140,000. Deducting £18,200, which is about the amount of profits tax and war levy payable in respect of this profit, and discounting the remaining balance of £121,800, he arrives at the figure of £103,165 as the value of the mine, above the 16th level, to this company. This valuation, in our opinion, has been made on reasonably safe lines from our point of view as buyers, and fairly represents the profit-earning capacity of the mine as it stands. In addition, you have the sundry other assets detailed, such as machinery and plant, gold in the plant, shareholdings, cash in hand and plantations, which represent either cash or a definite cash value to us straightaway; the whole of what I may term the tangible assets, including the value of the mine, totalling a present day value of £229,577. I have already pointed out that the Consolidated Main Reef will lose a sum having a present value of at least £37,100 in profits if the Main Reef West closes down; the value of that company to us must, therefore, be increased by this amount, making a total present value of £267,677. For this you are asked to increase your capital from 950,000 shares, of which 25,636 are in reserve, to 1,247,602 shares, and to pay the Main Reef West 323,238 shares. Taking Consolidated Main Reef shares as worth 15s., this means that

you are paying £242,428 in shares for assets worth to you in cash to-day £267,677, and in addition you will receive 338 claims which have not as yet been touched. On the basis of the par value of these 323,238 shares you would be paying pound for pound in shares for the assets valued conservatively at £267,677, and would acquire the 338 intact claims for the remaining 55,561 shares of £1. or 164 shares per claim, which, I think you will agree, is good business for us. It is, of course, impossible to assess the ultimate value of these intact claims, but generally speaking it may be fairly said that they had a considerable potential value to us.

### The Prospects.

In the hands of the Main Reef West their value may not appear to be very great, but that is due chiefly to that company's straitened financial condition, which makes it impossible for them to attack these claims. As we view the situation, however, there is no reason whatever to suppose that a large portion of this untouched ground will not yield good values in depth, since our deep level claims, adjoining the Main Reef West, on the same horizon, contain our most payable area. In fact we have fairly good reason for believing that it will do so, for as Mr. Wilkinson points out in his report, the best portion of the Main Reef West property lies against our western boundary; and as our western incline shaft—which is in our best ground—is only some 1,200 feet distant we could easily extend our western drives into the most promising portion of the Main Reef West area with reasonable hopes of developing a satisfactory proportion of good ground, below their 16th level, at comparatively low cost. These intact claims, which you must remember we will get for nothing, or very little, will undoubtedly add very appreciably to the security of our own mine in depth.

To summarise my remarks, I would repeat that, by taking over the Main Reef West on the terms before you, you will not only adequately protect your own company from obvious dangers threatening it, but you will make what your directors believe to be a good bargain.

I now beg to move:—

1. That the provisional agreement entered into on the 7th day of August, 1917, between this company and the Main Reef West, Ltd., and submitted to this meeting, be and the same is hereby approved, and the directors of the company are hereby authorised to carry the same into effect.

2. That the draft provisional agreement expressed to be made between the trustees for the debenture holders of the Main Reef West, Ltd., of the one part, this company of the second part, and the Main Reef West, Ltd., of the third part, be and is hereby approved, and the directors of the company are hereby authorised to carry the same into effect.

3. That the capital of the company be and is hereby increased from the sum of £950,000 (nine hundred and fifty thousand pounds), divided into 950,000 (nine hundred and fifty thousand) shares of £1 each, to the sum of £1,247,602 (one million two hundred and forty-seven thousand six hundred and two) shares of £1 each, by the creation of 297,602 (two hundred and ninety-seven thousand six hundred and two) shares of £1 each.

The resolutions were carried.

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